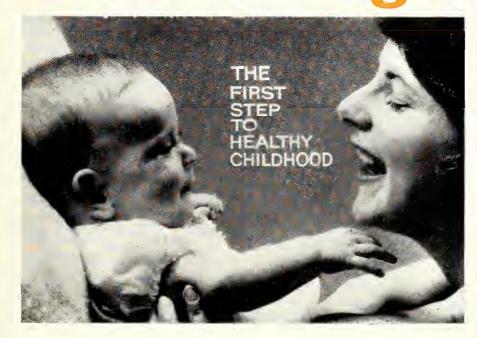
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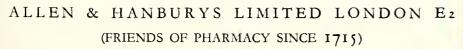
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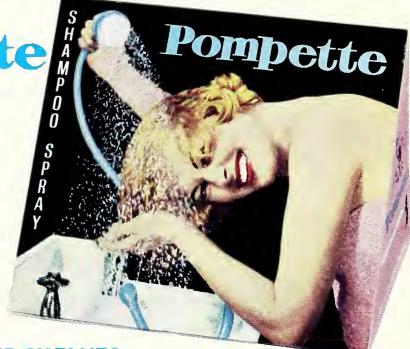
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No. 4312

Society Meets N.P.U. TALKS ON "CLOSER LIAISON"

REPRESENTATIVES of the Executive Committee of the National Pharmaceutical Union and the Council of the Pharmaceutical Society met at the Union's headquarters in London on October 1 to discuss whether the Society could play some active part in National Health Service affairs through representation on, or closer liaison with, the Central N.H.S. (Chemist Contractors) Committee.

The report of the meeting is being considered by the full N.P.U. Executive on October 24, and representatives of the Executive, of the Company Chemists' Association, Ltd., and of the Cooperative Union, Ltd., have arranged a meeting for October 18. They will then discuss the policies to be adopted in future negotiations with the Ministry of Health on N.H.S. remuneration generally, with a view to maintaining "unity of purpose through the closest possible liaison." Talks are also planned between the N.P.U. Executive and the trade-union side of the National Joint Industrial Council for Retail Pharmacy, in order to remedy those defects in the present J.I.C. agreement that affect pharmacists. The N.P.U. are understood to be aiming at a "completely new approach" to the problem.

Drug Toxicity

EUROPEAN SOCIETY FORMED

A EUROPEAN Society for the Study of the Toxicity of Drugs, representing scientists employed by the major European pharmaceutical companies, was formed at Zürich on September 20, when it was decided that every effort should be made to encourage research into methodology and the exchange of information in the field. The following committee was appointed to establish the Society and arrange its meetings: Dr. D. G. Davey (pharmaceuticals division, Imperial Chemical Industries, Ltd.), Chairman; Dr. P. Koetschet (Rhône-Poulenc, Paris, France); Dr. G. A. Overbeek (N.V. Organon, Oss, Holland); Dr. J. Scholz (Farbwerke Hoechst, A.G., Frankfurt-on-Main, Germany); Dr. M. Tausk (N.V. Organon, Oss), and Dr. J. Tripod (CIBA, A.G., Basle, Switzerland), Secretary. Membership of the Society is open to all interested scientists, whether employed in industry, universities, governmental or international organisations. Those desirous of joining should write to Dr. J. Tripod, CIBA, Ltd., Basle, Switzerland, for further details of the organisation and for a membership application form.

Medical Propaganda

"PROTECTION" FOR DOCTORS URGED

"AT a time when unproven or worth-less remedies cost the National Health Service £ $5\frac{1}{2}$ millions every year, many family doctors are dependent on drug company salesmen for their further education." That was alleged by Professor Alastair Macgregor (professor of materia medica and therapeutics, Aberdeen University), speaking at the annual meeting of the Scottish Association of Executive Councils in Rothesay, on September 28. Professor Macgregor suggested that a special propaganda agency, geared to the methods of big advertising, was needed to protect the medical profession from the salesmen's blandishments. "It is well known that the progress of an effective representative round the doctors in an area can be accurately mapped by charting the pharmacies from which come orders for supplies of a remedy which the representative is advocating to doctors," said Professor Macgregor. He went on: "This indicates too often the acceptance of the medical representative as a medium for further education of the

practitioner, and that rôle must be condemned. It could imply a lack of ability by the practitioner to evaluate for himself the significance of the representative's statements and blandishments." In addition, the general practitioner had to contend with the "pill mania" of the public. "There is therefore all the greater responsibility lying upon the general practitioner to restrain himself from trying new drugs on patients to see whether they have the effects claimed for them. One can contemplate almost with equanimity a new division of health propaganda, with its own under-secretary, directing at doctors advertising procedures and techniques comparable with those adopted towards the public by the nationalised industries."

Chemical Laboratory

"OPEN DAYS" EXHIBITS

THE National Chemical Laboratory, Teddington, Middlesex, held its "open days" on September 25 and 27, when members of the Press and public were invited to inspect work in progress. The work of the laboratory falls into three main groups: The determination of natural physicochemical constants; the exploitation and conservation of natural resources; and the exploitation of materials with potentially interesting new properties. In addition there is the research unit of the director (Dr. J. S. Anderson) which is investigating the mechanism of reactions occurring at solid surfaces. Research on polymers and polymer intermediates figure prominently in the research programme of the new materials group. Boronnitrogen and aluminium-nitrogen compounds and polymers are being investi-



INTERLUDE ON THE DANUBE: A group of F.I.P. excursionists during a lunch-time halt at Krems on the Danube, where they were given a civic welcome, Facing the camera are Mr. Tom Reid (a member of Council of the Pharmaceutical Society), Mr. M. Costello, Dublin (a former president of the Pharmaceutical Society of Ireland), Mrs. John Grosset, Edinburgh, Mrs. Costello, Mr. H. Campbell (a member of Council of the Pharmaceutical Society of Northern Ireland) and Miss M. A. Burr (president of the Pharmaceutical Society of Great Britain). At left of picture are Messrs, C. W. Maplethorpe (vice-president of the Society) and H. Steinman (a member of Council).

gated for their properties of thermal stability, and work is being done on the synthesis and applications of ionexchange materials and membranes. The latter are being studied to determine their mode of action and in the hope of enhancing their selectivity. Oxidation-reduction resins based on polyquinone and polymcllocene systems have been synthesised and are under-going evaluation and polarographic study. A significant advance in polymer fractionation has recently resulted from investigations into gel filtration techniques. Another promising line of research being undertaken by the Laboratory is the extraction of metals from minerals by flame technology. It has been found that when finely ground minerals are passed into a very high temperature flame, the mineral can be vaporised and later condensed as a series of metal oxides or, under certain conditions, as the constituent metals themselves. Another major interest is the study of possible economic processes for the recovery of beryllium from low-grade beryl ores.

Pharmacy and E.E.C.

AN EVENING MEETING IN LONDON

"THE Pharmacist in the European Economic Community" is the subject of the first of the Pharmaceutical Society's evening scientific meetings of the 1962–63 session. The address is being given by Dr. Werner Klie at the assembly hall of the School of Pharmacy, University of London, at 7.30 p.m. on October 18. Dr. Klie is president of the West German Pharmaceutical Society and the pharmaceutical group, European Economic Community, and is the owner of a pharmacy in Hamburg. Dr. Klie has been invited to discuss the development of European economic and political unity with special reference to the position of the pharmacist in it.

Surrey Golfers' Supper

DISTRIBUTION OF PRIZES

OVER sixty members and guests of South London and Surrey Pharmacists' Golfing Society attended the annual supper at Shirley Park Golf Club, Crovdon, on September 19, and witnessed the distribution of cups and trophies by principal guest Mr. Ross Gardner (captain, Shirley Park). Chairman of the proceedings was the Society's captain (Mr. George Penman), who, those assembled were reminded, had recently emerged winner at a combined meeting with London Chemists' Golfing Society. The prizewinners were greeted in vociferous manner; in particular Mr. Lawson Wrathall won hearty applause at the conclusion of his act as master of ceremonies. Principal prizes were won as follows: Founder's trophy and President's prize; 1, E. Foster; 2, D. Spier; 3, J. Mackenzie; Scotia bowl, B. O'Kane; Calcutta cup, G. Stanton; Widocks Memorial trophy, F. Jamieson; Bobby Locke trophy, G. Philp; Captain's prize, D. Hobern; Seniors prize, H. Duckering; Verona trophy and Glynne Roberts prize, G. Jamieson; Phil Thorp putter, A. Seath; Alec Reary prize, W. McElhinney; George Watt tankard, H. Brown; Ucal challenge cup, J. Grime; Croydon Shield, 1, J. Cuthbert; 2, F. Jamieson; Unichem trophy, F. Jamieson; Cow & Gate cup, A. Seath. Presented for the first time, and won by J. Mackenzie, was the Banstead bowl, which rumour has it, was acquired "for a song" by four members known as the "Banstead boys" during a successful jaunt in Brighton last year.

Ports Development

REPORT SUGGESTS SWEEPING CHANGES

IN a 264-page report to the Ministry of Transport a Committee which was set up in March 1961 under the chairmanship of Lord Rochdale to consider the adequacy of Britain's major docks and harbours to meet present and future national needs, finds that the level of charges at the cheapest British port was on average just under twice as expensive as the cheapest Continental port and the dearest British port more than three and a half times as expensive. In their recommendations for individual ports they suggest that the London and St. Katherine Docks could be closed. [A fair proportion of Britain's imports of crude drugs and essential oils are warehoused at London Dock.

Standards Institution

FINANCIAL SUPPORT LACKING

THOUGH the importance of British Standards to industry and trade is increasing and demands on the services offered by the British Standards Institution are growing, the financial support forthcoming from industry and local government is not keeping pace with those developments. Putting those facts before subscribing members at the Institution's annual meeting in London on September 26, the president (Mr. G. Cunliffe) said that during 1961-62 sales of British Standards had risen 14 per cent. to a record 1,322,000. In the chemical field, two of the important subjects being tackled were industrial gases and additives to foodstuffs. Use of the kite-mark on materials and products to show they were fully up-tostandard was increasing—even more on industrial goods than consumer products. Further particulars of B.S.I. work during the year under review are

contained in the annual report (price 7s. 6d.), available from the British Standards Institution, 2 Park Street, London, W.1.



AT HELSINKI FAIR: Mr. J. M. Kirkness (deputy secretary, Association of the British Pharmaceutical Industry) who represented the Association at the Finnish International Trade Fair held in Helsinki, September 21-30. Five pharmaceutical manufacturers showed their products on a "group" stand. With Mr. Kirkness (centre) are Messrs, G. Balt (Scientific Instrument Manufacturers' Association) (left) and R. E. Tipton (Agricultural Engineers' Association).

Anæsthetic Equipment

STANDARDISATION SYMPOSIUM

A SYMPOSIUM on the standardisation of anæsthetic equipment was included in the agenda of the first European Congress of Anæsthesiology which was held recently in the Vienna Hofburg. Under the joint chairmanship of Dr. H. G. Epstein (Radcliffe Infirmary, Oxford) and Professor R. Frey, Mainz. Germany, the symposium included discussions on cylinders for medical gases (identification, colours and sizes). Fit-tings and valves; endotracheal tubes and attachments; connections, fittings and controls for anæsthetic apparatus; antistatic rubber and explosion precautions; sterilisers, ventilation, etc., in relation to operating theatres and recovery wards as affecting anæsthetics; breathing machines. In that field of standardisation the British and American Committees (of the British Standards Institution and the American Standards Association) have played an important rôle in preparing, in close liaison with each other, national specifications for anæsthetic and related equipment.

IRISH BREVITIES

THE REPUBLIC

A STUDY conference on "Disease in the Aged" sponsored by the Royal College of Surgeons in Ireland, and Bayer Products division, Winthrop Group, Ltd., is being held on October 11 at 7 p.m. at the Royal College of Surgeons, St. Stephen's Green, Dublin.

KILRUSH, co. Clare, Eire, urban council considers that the Government of the Republic should exercise tighter control over the sale of drugs. At a recent meeting, members asked that the sale of all drugs should be banned until tested and approved. They pointed out that a preparation for cattle was not allowed into the country from Britain because the makers were not prepared to divulge the formula. "Animals are better protected than humans in that respect," declares the council.



SURREY GOLFERS
AND THEIR TROPHIES: A group of
prizewinners photographed at the annual
supper of the South
London and Surrey
Pharmacists' Golfing
Society on September
19. The Society's captain is fourth from left,

NEWS IN BRIEF

THE August issue of *Prescribers'*Journal contains critical reviews of tranquillisers, hypnotics and sedatives, antidepressants and anabolic steroids.

PRICES of drugs and preparations included in section I of the Drug Tariff (Scotland), and appliances in section IV, have been revised as from October 1.

GUIDANCE on the design of a hospital boiler house and steam boiler plant is given in No. 16 of the Ministry of Health Hospital Building Notes (H.M. Stationery Office, price 2s.).

SHORTAGE of imported fowl-pest vaccine has caused the Ministry of Agriculture to delay its programme of widespread distribution of the vaccine to poultry keepers.

EMPLOYEES in the chemical and allied industries totalled 527,000 during August (9,000 less than in August 1961) according to statistics issued by the Ministry of Labour.

A FALL of 54,570 prescriptions during the year 1961-62, due partly to the introduction of additional charges in March 1961, is reported by the Lothians and Peebles Executive Council in its annual report.

WHIFFEN & Sons, Ltd., Loughborough, Leics, held an "open day" for the public at their factory premises and the new extensions to the Derby Road plant on September 29. The extensions, costing £500,000, were formally opened by the company's chairman (Mr. A. H. Pashley).

MR. Norman Burfitt (an executive of the Lederle Laboratories division, Cyanamid of Great Britain, Ltd.) gave an illustrated talk on the pharmaceutical industry and the National Health Service to members of the North London Young Conservatives on September 25.

SPORT

Golf.—IRISH CHEMISTS' GOLFING SOCIETY. Hermitage golf club was the venue for the Society's penultimate outing of the season on September 26. Competition for prizes presented by Irish Pharmaceuticals, Ltd. and Innoxa (England), Ltd. Results: First Strokes, J. J. Dawson (15), 34½; Second Strokes, R. J. Power (10), 35; First Bogey, M. Ryan (7), all square; Second Bogey, S. Byrne (20), all square; Class 1, D, Argold; Class 2, P. Twohig. The awards were presented by Mr. Hugh Palmer (managing director, Irish Pharmaceuticals, Ltd.) and Mr. D. Flanagan (Eire representative of Innoxa).

LONDON CHEMISTS' GOLFING SOCIETY, The final meeting of the season was held at Muswell Hill golf club on September 26 when thirty members attended and played for the following prizes: Results: President's putter and prize (medal competition), 1, E. S. Jobling (9), 68; Squibb centennial trophy and prize, 1, D. A. Savory (16), 35 points; Hepburn shield (Stableford competition), 1, P. J. Thorp (11), 35 points; Other leading scorers, J. A. Bennett (9), 35 points; C. H. Beck (20), 35 points; R. H. Davies (10), 34 points.

Bowls.—SCOTTISH CHEMISTS' BOWLING ASSOCIATION, at Sighthill Green, Edinburgh, on September 5, when a singles game was played for the Scottish Chemists' Travellers' trophy. Results: 1, J. Menzies, Duntocher, 2, W. Dickson, Edinburgh, At Camelon Green on September 26, a pairs game was played for the D. & W. Gibbs trophy. Results: 1, H. B. Godfrey, Camelon, and J. Brown, Edinburgh, Runners-up prizes, J. B. Fowler, Edinburgh, and J. Izato, Glasgow.

TOPICAL REFLECTIONS

By Xrayser

A free Press

One of life's biggest problems is to get things into perspective. The Press comments referred to in your editorial on p. 359 do nothing to help the situation created by the thalidomide tragedy. The Press, in general, has lost no opportunity of presenting to the public the case against thalidomide. If we are to have a free Press in this country—and the Press is at pains to underline the vital necessity in the public interest of such an institution we must not only expect the full blaze of publicity to fall on such an occurrence, but we must be grateful for the persistence of the illumination. Hardly a day passes without some reference to the drug and its victims, and the public cannot complain of lack of information and comment. To the credit of the manufacturers, at the first hint of a possible connection between the drug and the condition—at first merely suspected—all supplies were withdrawn. There was no hesitation whatsoever. In another direction, suspicion has fallen on a commodity which, unlike thalidomide, has had unrestricted sale. From time to time medical pronouncements are made in regard to a suspected connection between cigarette-smoking and cancer. To provide a parallel with the attitude taken up by the drug manufacturers, the tobacco companies should immediately have withdrawn the goods from sale until intensive research proved that there was no connection. The Press should have given full and continuous publicity to the medical case and, in the public interest which they have so much at heart, they should have refused to accept advertisements for goods which informed opinion had stated were suspect. From my observation that, for some unknown reason, does not appear to have happened. Advertising has been increased enormously.

Addiction

The papers presented to the symposium session of the British Pharmaceutical Conference, 1962, all dealing in some degree with the problems of drug addiction, did not add vastly to our knowledge, though each viewed the subject from a different angle. The long official experience of Dr. J. M. Johnston makes him an authority, and his direct and often terse and valid statements made a deep impression. Again, one is struck with inconsistencies, for Mr. B. J. Thomas, in opening his paper, stated that, apart from alcohol, morphine and cocaine are the oldest established drugs of addiction. An ever-tightening legislation brings more and more substances into the net, with increasing responsibility for the pharmacist. Yet the oldest established drug of addiction—alcohol—is virtually uncontrolled. It is possible to indulge to an extent at which control is lost and the taker becomes a danger to himself and his fellows. He may attack innocent people; he is an acknowledged menace on the roads; he may deprive his wife and family of necessities; he may, in extreme cases, become so addicted that he has to enter hospital for special treatment as an alcoholic. But the searchlight of Press publicity falls on "teenage junkies" and "Lovely Miss Heroin" and the like. There is no persistent blaze of publicity on alcohol and its victims. The Press, in fact, accepts advertisements for alcohol. It will be argued that only a limited number take alcohol to excess. Only a limited number took drugs to excess before controls were rigorously applied to everybody. Nothing in life is more out of reach than consistency.

Reasonable steps

A speaker who took part in the discussion at the symposium session raised a point that must have exercised the minds of many pharmacists when he asked what was meant by taking "reasonable steps to ensure that Dangerous Drugs Act prescriptions were genuine." Regulation 15 says that the person supplying must be acquainted with the signature of the person by whom it purports to be given and must have no reason to suppose that it is not genuine, "or has taken reasonably sufficient steps to satisfy himself (the italics are mine) that it is genuine." The regulations say nothing of having to satisfy anyone else.

Fifty Years of "F.I.P."

INTERNATIONAL FEDERATION'S JUBILEE AT VIENNA

NINETY or more pharmacists from Britain and Ireland were among the 1,350 from thirty-seven countries who attended the nineteenth General Assembly of the International Pharmaceutical Federation (Féderation Internationale Pharmaccutique) at Vienna, Austria, September 23-29, in the Jubilee year of the Federation. The group formed a representative cross-section of a representative cross-section of British pharmacy, including the presi-dent of the Pharmaceutical Society of Great Britain (Miss M. A. Burr), several other members of the Council, the secretary and registrar (Mr. F. W. Adams), his co-secretary who was also president of the Federation (Sir High Linstead), former presidents of the Pharmaceutical Societies of Northern Ireland (Mr. Hugh Campbell) and of Ireland (Mr. Michael Costello). Retail, hospital, academic and industrial pharmacy were all amply represented, and as pharmaceutical minorities, if one may call them so, there were present the chief pharmacist, Ministry of Health (Dr. H. Davis), and the secretary of the Pharmacopæia Commission (Mr. T. H. Denston).

Full State and civic honours were accorded to the Congress, for the president of the Austrian Republic and the mayor of Vienna were both present at the opening session, which was attended also by representatives of the Austrian Ministries of Health and Defence, of allied professions, and of the Austrian pharmaceutical industry. Members were welcomed by MR, GEORG PETRUS (president of the Oesterreichischen Apothekerverband, vice-president of the Oesterreichischen Apothekerkammer and chairman of the organising committee of the Congress) and the week's events were officially declared open by MR, FRANZ DITTRICH (president of the Oesterreichischen Apothekerkammer).

"Hospitable and Sumptuous"

SIR HUGH LINSTEAD, in his presidential address, said that the first international congress of pharmacy, held in Vienna in 1869, was the first international congress at which British phar-

macy had been represented, and in their report the British delegates had referred to "the most hospitable and sumptuous entertainment" provided by their Viennese colleagues. The 1962 programme demonstrated that those words were equally applicable to the Assembly today and those attending Assembly today, and those attending owed their warmest thanks to their Austrian colleagues who had helped in its organisation and who had been generous in their expenditure of energy, of time, and of enthusiasm to ensure that the Jubilee of the Federation should be worthy both of its history and of their city. Dr. Wittop Koning had written the history of those fifty years, and it was being published in the Journal Mondial dc Santé. They had been revolutionary in medicine and in pharmacy. The treatment of symptoms was steadily being replaced by the treatment of the causes of disease. The chemical and physical factors that de-termined the life, reproduction and death of bacteria, and even of viruses, what they fed on and what they excreted, were being found out. Scientists could penetrate into the nuclei of cells and alter their structure. They were discovering the means by which hereditary conditions were transmitted. The virus was being attacked from the other end by successful search for the structure of the large protein molecules. "We are also learning how to control the activity of the brain by the precise use of drugs." When all that knowledge was applied to the treatment of diseases in human beings it would lead, indeed it was leading, to greater and greater pre-cision in the use of drugs and other medicinal agents. Spectacular successes were being gained in attacks on the serious diseases, and it was well to remember what Hippocrates had taught over 2,000 years ago: that "dangerous iver 2,000 years ago: the dangerous iver 2,000 years ago: the danger diseases require dangerous remedies. The new drugs now being produced were becoming at once more specific, more potent and more dangerous.

As that became better understood, perhaps the public warning that pharmacy had given for so long would at

last be heeded: that drugs were not articles to be handled like ordinary merchandise or to be taken like food or drink. Effects of a drug other than the one desired were euphemistically called "side effects." Yet sometimes those so-called "side effects" could be more potent than the so-called "main" effect, as the tragedies of the deformed babies had shown. One lesson those tragedies taught: that there was no such thing as an absolutely safe drug. All must be treated with circumspection. The prudent man would see that they were used only as the doctor had directed, for the purpose for which he had prescribed them and by the person for whom they were intended. To store away old medicines against some future need was usually foolish and sometimes dangerous.

It was part of the daily duty of a pharmacist to warn the public that no drug could be taken with complete impunity. The truth was becoming clear that trust must be put not in the drug but in the physician and in the pharmacist. That was why, in every country, certain responsibilities were entrusted to both of them by law, and why those who argued that the economic law of free competition should apply to medicaments as it applied to any other commodity were trifling with health and human lives.

Appointments and Reports

Sir Hugh Linstead has been re-elected *President* for a further term, though he announced that this was to be his "last mandate." Dr. Birza, Holland, having resigned from the Bureau of the Federation, is being replaced by Mr. J. F. Kok, chief pharmacist at one of the larger Dutch hospitals. Mr. C. C. Stevens, England, is replaced as chairman of the industrial section by Mr. Niels Steinö, Denmark, Mr. W. K. Fitch, England, was appointed editor of the *Journal Mondial de Pharmacie*.

Next meeting of the General Assembly is to be at Amsterdam in 1964. A meeting of the scientific section is being held in 1963 at Münster, Germany, September 9-14. The 1963 Council meeting is being held at Warsaw, Poland, and invitations have been received from Stockholm, Sweden, and Dublin, Ireland, for Council meetings in 1965.

Professor Dr. Sorgdrager, Holland, has been appointed president of the section of hospital pharmacists. Mr. T. C. Denston, England, giving his report as secretary of the section of Secretaries of Pharmacopæia Commissions, mentioned that the first modern regional pharmacopæia, the Nordic, is appearing during 1962; that the collection of reference substances in the World Health Organisation's collection at Stockholm now comprises thirty items; and that the agreed general principles for devising international non-proprietary names have been modified by the addition of a recommendation that, for drugs of a pharmacological group, the name should indicate relationships, and that it is also desirable to indicate, if possible, chemical values.



IN SESSION: Sir Hugh Linstead presides at a meeting of the Bureau of the Federation. At his right are Dr. E. Höst-Madsen, Denmark, Professor M. Guillot, France, and Mr. Frank-Arnal, France; at his left Dr. J. Winters (secretary-general of the Federation).

INTERNATIONAL PHARMACEUTICAL FEDERATION'S JUBILEE CONGRESS

Remuneration of the Pharmacist

RETAIL MEMBERS' OPEN SESSION

AN open session of the Congress, under the auspices of the Commission on the General Practice of Pharmacy, discussed methods of remuneration of the general practitioner in pharmacy. The discussion followed the presentation of a paper on the subject read by MR M. HARDY, Belgium (chairman of the Commission), the argument of which was

briefly as follows:-

THE establishment of a scale of fees for the pharmacist is of great importance because indirectly it involves a matter connected with public health. Even before the Copenhagen meeting of the I.P.F. in 1960, Belgium had presented, for consideration by the Commission, a proposal putting forward, as the basic principle of remuneration, the idea of disassociating the value of the medicament from the value of the fee for the professional service rendered in supplying it. That method of arriving at the solution of the problem was not supported by a majority of the Commission because it was thought difficult to realise in practice and unlikely to find support among either practitioners or public authorities. Following publication of that statement, an inquiry was undertaken in which took part the appointed delegates of Great Britain, Germany, Austria, Italy, Denmark, France, Switzerland and Belgium, A single uniform formula for remuneration was found difficult to frame, the practice of pharmacy and conditions of work being so different between one part of the world and another, and even within the same country.

Pharmacists' Manifold Responsibilities

In supplying a medicament for a sick person a pharmacist must take account of legal requirements, must comply with the medical prescription, must inform the patient about the dosage, and must be on the watch for signs of addiction. He must remain in a position of independence of his client—a sick person. And he must know when to refuse to supply a medicament if that appears necessary. His remuneration must be such that he remains convinced that he is receiving a just reward for work conscientiously performed. Health-service organisations must not be allowed to restrict remuneration unjustly in order to enable budgets to be balanced.

Pharmaceutical practitioners must not be made to bear charges for which they have no sort of responsibility. The pharmacist has the burden of maintaining an ever larger and more varied stock. The value of new medicaments involving research is high, and it follows that the value of immobilised stock becomes

ever greater.

The amount of the pharmacist's remuneration should not be influenced by irrelevant considerations, though the pharmacist himself must not have the right to reduce it by offering discounts. The remuneration must be protected against encroachments, whether by public organisations or powerful institutions of a social or other character, and

against the actions of colleagues. It is for the pharmaceutical authorities themselves to deal with infringements of their own ethical codes. Against outside encroachments protection must be ensured in the wording of the agreements between public authorities and the professional associations. The epoch is ended in which the remuneration of the pharmacist can be either arbitrarily decided by the individual himself or unilaterally established by professional associations. The value of the services rendered must be made the object of serious study. Too many responsible people believe that the ideal solution in the domain of social security is to concentrate all endeavour into seeing that the medicament arrives in the most direct way possible, and at the lowest price, into the hands of the consumer. Many important firms in the pharmaceutical industry believe that the major objective is to increase the consumption of their products to the greatest possible extent at the highest price and be paid by health service authorities. In such a climate, how can one wonder that an idea forms that the pharmacist is a costly, troublesome, even useless intermediary? If his position gives him the opportunity of avoiding a single fatal accident the pharmacist must rank among those who are called to render service of the greatest significance in the public interest.

Praise and Blame for the Report

The report came in for both praise and strong criticism. In the former category could be put the remarks of MR. J. A. VERREYDT (secretary-general for pharmaceutical general practice, European Economic Community), who said that, for the Rome Treaty countries, the practice of pharmacy was destined to be harmonised to give free interchange of pharmacists within member countries. Their rights were clearly defined in the legal texts, and the new régime was due to come into operation before January 1, 1963. He thought it admirable that the conclusions arrived at by Mr. Hardy and his collaborators were in parallel with the resolutions of "the Six," which aimed, among other things, to lay stress on the important rôle of the pharmacist and of the control laboratories; at a declaration that the distribution of medicaments should be in the hands of pharmacists exclusively; at the decommercialisation of pharmacies by the elimination of all non-medical merchandise; and at ensuring for the pharmacist an adequate scope for his activities. It was high time for pharmacists to take action to safeguard their position. Rapid adjustment was demanded of pharmacists in the countries of the European Economic Community, and his desire was that there should be no clash between E.E.C. and

Mr. J. VOLCKRINGER, France, said the paper dealt in the main with something that ought to be, but the French Ministry of Health, with which he was

associated, agreed on the necessity of maintaining the pharmacist's independence and sense of responsibility. The rôle of the pharmacist would always be endangered if patients ran the risk of side-effects from a drug, and pharmacists should recognise that they had an important part to play in the distribution of such medicaments. He would like them all to warn the general public against using certain drugs.

MR. B. BRUS, Belgium, praised the Commission for dealing with the entire problem, including the continuance of pharmacy as a liberal profession, its decommercialisation, and its monopoly of distribution, but said that the main points of the study were put forward only in the form of basic principles. Much information needed to be col-

Too Limited in Range?

The criticism came strongly from DR. GEORGE GRIFFENHAGEN, U.S.A., who said he was struck by the small geographical range of the countries represented on the Commission, and surprised that it contained no representa-tive of the Western Hemisphere or of No inquiry had been received from the Commission by the American and Canadian Pharmaceutical Association, and at Vienna the Commission had sat behind closed doors, with others He would prohibited from entering. have liked to see specific recommendations on the subjects of professional fee and public relations.

MR. H. STEINMAN, Great Britain, made criticism on another point. If, he said, the Commission had information on which its report had been based, that information should have been placed before the meeting. He supported Dr. Griffenhagen's remarks and said that retail pharmacists, for whom he had suggested in 1955 that a section of F.I.P. should be formed, would benefit by being treated less as an inferior group

within the Federation.

In winding up the debate Mr. HARDY said that the contributions proved the interest of the subject. Dr. Griffenhagen's criticisms were based on a misconception. A Commission was a tool of the Federation, set up to conduct a particular project. To have to explain to newcomers at each meeting what had been done till then would make the completion of its task impossible. It was, however, being supplemented by members from Greece, Jugo-Slavia, Spain and Sweden. He pointed out that for the first time the Congress had included in its agenda a public session for retail pharmacists.

Records Presented

During the General Assembly at Vienna Professor Gallo, Italy, formally presented the published records of the twenty-first Congress of Pharmaceutical Sciences, a considerable volume paid for by the Federation of Orders of Pharmacy of Italy (an amount of 4 million lire).

LEGAL REPORTS

Hegal Sales

Aт Haltwhistle, Northumberland, magistrates' court recently, Gordon Henry Griffiths, Main Street, Brampton, admitted selling lozenges at his drug store in Gilsland, Cumberland, in contravention of the Pharmacy and Poisons Act, 1933. It was stated the lozenges, containing benzocaine, were sold to a representative of the Pharmaceutical Society of Great Britain. The business was not normally under the personal control of a registered pharmacist. Griffiths, who admitted selling lozenges at the store when not authorised, and selling them in a container not labelled with the name of the seller and address of the premises, was fined £1 in each case with £5 5s. costs. He said it was the only packet in the store. The chairman of the bench described the offences as "technical." For unlawfully selling by retail benzocaine in a preparation not labelled with the name of the seller and the address of the premises from which it was sold, and for selling the poison when not an authorised seller, Mrs. Annie Harris, 1 Tiber Street, Liverpool, was on September 13 fined £20 with £5 5s. costs by the Liverpool stipendiary magistrate. She pleaded guilty. Mr. A. C. Castle, prosecuting for the Pharmaceutical Society, said Mrs. Harris was an unqualified person who had a business in which she sold "patent" medicines, toilet articles and cosmetics. Her husband was a registered pharmacist. She was visited by a representative of the Pharmaceutical Society and she served him with a preparation which contained a scheduled poison.
Mr. I. Levin, defending, said Mrs.
Harris had only ordered two boxes of the preparation for a specific customer and her lady assistant had made the sale without her knowledge and having no knowledge that they contained a scheduled poison.

Forged Prescriptions

AFTER relating how a man had obtained Preludin tablets by forged prescriptions stolen from an Islington surgery, a detective sergeant said at North London magistrates' court on September 25, "He is not the only man going round with these prescriptions. Since he was arrested last night, another attempt was made at a chemist's at Dalston." Thomas Henry Wall, unemployed and of no fixed address, pleaded guilty to uttering a forged National Health Service prescription, knowing it to be forged, and obtaining 100 Preludin tablets, value 18s. by virtue of a forged prescription, on September 18. It was stated that a pad of prescription forms was stolen from a doctor's surgery in North London and a fortnight later prescriptions on the forms were being tendered in the area and a warning was given to chemists. On September 24, Wall went into a pharmacy at Stamford Hill with a prescription on one of the forms, and the manager called the police. The magistrate asked if the defendant was selling the tablets. The detective replied: "He says he has taken them himself but that is impossible—they should only be taken two at

a time a day and he has had over 150 in a week," The magistrate: "It looks as if he is trafficking in them but you have no evidence to support it." "Not at this stage." Wall denied that he had been getting the tablets to sell them and claimed that he had given them away. The magistrate said the offences were very serious and he thought that both in the interests of the public and of the accused, he should know more about Wall before dealing with him. Wall was, therefore, remanded in custody until October 13.

Sold in Good Faith

AT Eastbourne County Court £125 damages were awarded to Miss Angela Cole, on September 27, in respect of a claim she made against F. W. Woolworth & Co., Ltd. Miss Cole told the court that the second time she used a bottle of medicated shampoo which she had bought at the company's St. Leonards Road, Eastbourne, branch, it collapsed in her hands and her thumb was badly cut. "It went pop—like a cork coming out of a champagne bottle," said Miss Cole. The top of her thumb had been nearly cut off, she told the judge, and it now felt numb, though it did not affect her work. For Miss Cole, it was said that the injury affected her in such things as threading a needle. The judge said Messrs. Woolworth operated a firstclass store and would never have obtained the good reputation it had if it conducted its business in a haphazard way. "I have decided in favour of the plaintiff, but apart from technical liabilities there is no evidence that Woolworths were responsible for the bottle's condition. I am satisfied the bottle was damaged before Miss Cole bought it. There is no blame whatsoever attached to Messrs. Woolworth. They sold the bottle in good faith. Nevertheless, there was a weakness in the bottle," said the judge, awarding damages to Miss Cole.

COMPANY NEWS

Previous year's figures in parentheses

OPTREX (OVERSEAS), LTD.—Mr. L. Z. Skelton (chief chemist) has been appointed to the board.

EVANS MEDICAL, LTD. — Dr. F. S. Gorrill succeeded Mr. I. V. L. Fergusson as chairman and managing director on October 1.

LAPORTE INDUSTRIES, LTD. — Dr. Charles Hill, M.P., and Mr. F. S. Poole (managing director, Peter Spence & Sons. Ltd.), have been appointed directors.

KELDON, LTD.—Messrs. H. Hulme (chief accountant), H. M. Barton (sales manager) and A. F. Dommersen (assistant managing director and personnel manager) have been appointed to the board.

MASON & CO., LTD.—Mr. J. C. Toshach, M.P.S., has retired from the board after twenty-five years as a director. Mr. John T. B. Mason, M.P.S., has been appointed managing director and superintendent pharmacist with Mr. C. D. Mason, chairman.

PROCTER & GAMBLE. — The directors' statement accompanying the accounts for the year ended June 30

mentions that the company spent £1·1 million on research and £50,000 on capital items for research. Profit, after tax, was £2·3 millions (£2·7 millions).

ARNOLD M. GEE, LTD. — Final dividend, 10 per cent., making 20 per cent. for year to March 31 (same). Trading profit, £37,203 (£37,513), less tax, £14,948 (£14,437), depreciation, £2,074 (£1,679), written off goodwill and leases, £2,787 (£2,150) and loss on sale of property and business nil (£1,067).

SANGERS, LTD.—Group trading profit fell from £510,465 to £381.132 in the year to February 28, and the dividend is reduced by 2½ per cent. The final dividend is 1¼ per cent, making 6¼ per cent. (against a total of 8¾ per cent.). Profit, before tax, dropped from £317,938 to £196,390.

JAYNOX, LTD.—Final dividend, 5 per cent. on increased capital, making $17\frac{1}{2}$ per cent. for year to April 30, as forecast in March public placing. Profit, £65,454 (£64,033), before tax, £33,474 (£31,609). Minority interests, £1,170 (£1,169), subsidiaries' retentions, £5,423 (£4,099), leaving net profit £25,387 (£27,156). Profits retained and transferred to revenue reserve, £8,530 (£9,975).

GLAXO GROUP, LTD. — A final dividend of $8\frac{1}{2}$ per cent., making 16 per cent. (against 15 per cent.) for the year ended June 30, and a scrip issue of one share for every four held is proposed. Profit before tax has declined from £7.6 millions to £7.38 millions, and after all charges, including £4 millions (against £3.9 millions) for tax, the net profit has declined by £375,000 to £3.34 millions. Earnings of around 46 per cent. cover the increased dividend nearly 2.9 times.—Dr. F. S. Gorrill joined the board on October 1.

HORLICKS, LTD.—Estimated consolidated profit before taxation for the year ended March 31, will not be less than £950,000. A final dividend of 20 per cent., making a total of 30 per cent. for the year. The directors of Horlicks consider that they will be able in the absence of unforeseen circumstances, to at least maintain this rate of dividend in the current year. This advance information is released in connection with an offer which Horlicks are to make for the whole of the issued Ordinary share capital of Fardons Vinegar Co., Ltd., on the basis of one 5s. Horlicks' share and 4s. cash for every two Ordinary Fardons' shares of 5s. The Directors of Fardons recommend acceptance of the offer.

BUSINESS CHANGES

H. A. CLARKE (CHEMIST), LTD., have opened a branch pharmacy at 33A High Street, Brentwood, Essex.

THE ASSOCIATION OF THE BRITISH PHARMACEUTICAL INDUSTRY has removed to Mercury House, 195 Knightsbridge, London, S.W.7 (telephone: Kensington 8201).

EUCRYL, LTD., Oakley Road. Southampton, state that their representation has been reorganised and that they are now handling chemists' orders for both their own and Thompson & Capper branded products.

GALE, BAISS & CO., LTD., and its subsidiary companies (Burgoyne Burbidges & Co., Ltd.; Rouse of Wigmore Street, Ltd., and Sparks, Treharne & Co., Ltd.), members of the Horlicks group, have removed to 11 Stoke Poges ane, Slough, Bucks (telephone: Slough

SCOTT-BRAND FOODS, LTD., has been formed within the Cerebos, Ltd., group to take over the marketing and distribution of all products manufactured by A. & R. Scott, Ltd.; Brand & Co., Ltd., and Stamina Foods, Ltd. The offices remain at 10 Victoria Road, London, N.W.10, but the telephone number is now Elgar 2001.

BRONCO, LTD., Atlas Works, Berkshire Road, London, E.9, have created five new divisions in the United Kingdom and appointed managers as follows: Anglia division: Mr. R. Gunson; Eastern division, Mr. R. V. Foulkes; Western division, Mr. W. G. Fowler; Southern division, Mr. R. J. S. Strong; and Northern division, Mr. J. R. T. Spencer.

Appointments

EVANS MEDICAL (IRELAND),
LTD., have appointed Mr. W. O'Connell, Ph.C., their pharmaceutical representative in Connaught and Munster.

LAPORTE CHEMICALS, LTD., announce the following appointments: Mr. C. W. LeFeuvre, manager, technocommercial division; Mr. D. H. Punter, manager, home sales division; and Mr. G. A. Brittain, manager, chemical marketing division.

THE PFIZER GROUP have appointed Dr. J. M. Turner manager of their petrochemical research and development department. Until completion of the research facilities at Baglan Bay. South Wales, Dr. Turner has taken over one of the laboratories at the company's London plant at Bromley, Kent. The appointment of Mr. D. V. W. Perry, as head of the company's ure-thane foam laboratories, is also announced.

PERSONALITIES

MR. FRANK H. BAILEY, who is well known among merchants and bro-kers of botanical drugs in London's Mincing Lane and who was manager of F. W. Berk's drug department, retired on September 28 after fifty-one years' service with the company.

DR. A. E. GREMEAUX, a director, and virtually the "founder-member' Roussel Laboratories, Ltd., London, has accepted the position of export medical director of all overseas activities within the Roussel-Uclaf group. Acceptance of the new position means that Dr. Gremeaux is transferring his location from London to Paris. During the sixteen years he has been in London with Messrs. Roussel Laboratories he was responsible for the difficult task of reconstituting the organisation immediately after the war, and has played a major part in building the company up to the position it occupies today. His responsibilities as head of the medical department in London are being taken over by Dr. J. P. W. Young, who has been his deputy for the past five years.

MR. I. V. L. FERGUSSON, who retired as chairman and managing director of Evans Medical, Ltd., and as a director of Glaxo Group, Ltd., on September 30, joined Messrs. Evans (then known as Evans Sons Lescher & Webb, Ltd.), in 1919. After an apprenticeship Mr. Fergusson spent five years visiting overseas customers in South Africa, the Middle East and South America. On his return in 1927 he was appointed export director. In 1931 he changed to become home sales director and ten years later became managing director. On the death of his uncle (Mr. J. H. E. Evans) in 1943, Mr. Fergusson succeeded him as chairman. He took part in many trade activities, including membership of the Chemists Federation Council, 1938-42 (president 1940-41). He was a member of the executive of the Pharmaceutical Export Group, 1940-48, of the council of the Association of British Pharmaceutical Industry 1944-49 (chairman 1946-48), member of council of the Association of British Chemical Manufacturers, 1948-61; and chairman of the pharmaceutical industry's negotiating commit-tee appointed to agree with the Ministry of Health on prices of standard drugs and proprietary products for the National Health Service (and to justify whole-



Mr. I. V. L. Fergusson (left) chatting with Messrs. A. D. Cromwell Morgan and T. Garner during the party.

salers' profits on them), 1952-60. At a cocktail party held in his honour in Liverpool on September 28, Mr. Fergusson received a radio and television sct and other gifts from the staff managers.

OVERSEAS VISITS

MR. L. A. COOMBS (managing director, Warner-Hudnut group) left Britain on September 29 on a two week trip to Africa. Main purpose of the visit is discussions with the company's affiliate in South Africa. During his return Mr. Coombs is visiting Kenya to look at one of his company's most important export markets.

MR. NEWTON JONES, M.B.E. (chairman and managing director, W. H. Jones & Co. (London), Ltd.). leaves London by air on October 7 for an extended tour by way of Africa to Australia and New Zealand, returning via the United States. Mr. Jones has in recent weeks been visiting some of the main industrial centres in Britain and the Continent to meet suppliers and agents.

MARRIAGES

STEEL - CHAMBERLAIN. - At Lewisham register office, London, S.E.13, on September 29, Donald John Steel, B.Pharm., F.P.S., 36 Grosvenor Gardens, London, N.14, to Olive I. Chamberlain, London, S.E.24.

DEATHS

ARCHIBONG.—On September 23, Mr. Peter Etim Archibong, general manager, May

& Baker (West Africa), Ltd. Born in 1905 to a well - known Calabar family, Mr. Archibong qualified in Nigeria as a pharmacist and worked for many years in Government service as a_hospital pharmacist to the Nigerian Medical Depart-



ment. He joined May & Baker (West Africa), Ltd., as a representative in 1946. In recognition of his many achievements and services to pharmacy, he was elected president of the Nigerian Pharmaceutical Society in 1952. He was appointed to the Board of May & Baker (West Africa), Ltd., in 1955 and was made general manager of the company in 1961. For many years Mr. Archibong had a reputation as a fine footballer and keen tennis player and continued to take a deep interest in those sports throughout his life. He made many friends and will be sadly missed in both Nigeria and Great Bri-

COOK.—Suddenly, on September 27, Mr. Stuart Edward Cook, M.P.S., 34 Fircroft Road, London, S.W.17. Mr. Cook qualified in 1920.

FAIREST. — Recently, Mr. William Reginald Fairest, M.P.S., 126 Lowedges Road, Sheffield, 8. Mr. Fairest qualified in 1924 and was for a number of years superintendent pharmacist for the Brightside and Carbrook Coopera-tive Society, Ltd., until 1943, when he opened his own business in Greenhill. Sheffield. Five years ago he transferred the business to Lowedges Road. For some years Mr. Fairest was a member of the local Pharmaceutical Committee. He was a prominent Freemason and a keen golfer.

GILCHRIST. — On August 30, Mr. Patrick Gilchrist, Kilnaleck, co. Cavan. Eire. Mr. Gilchrist qualified as a registered druggist in 1927, and became a dispensing chemist and druggist in 1954. A daughter, Helen, is a final-year pharmacy student.

SEWELL. — Recently, Mr. Arthur Elliott Sewell, M.P.S., The Walks East, Huntingdon, Hunts, Mr. Sewell was in business at 101 High Street, Huntingdon. for over forty years until he retired ten years ago. His business was then taken over by H. S. Turner (Chemist), Ltd., St. Ives, Hunts. Mr. Sewell was apprenticed in Peterborough and then worked in Yarmouth before qualifying in 1902.

TRADE NOTES

A New Size.—The Mentholatum Co., Ltd., Slough, Bucks, announce the introduction of a new medium-size Mentholatum deep-heat rub containing twice the quantity of the standard pack.

Energy for a Walker.—British Chemotheutic Products, Ltd., Kemtheutic House, Grant Street, Bradford, 3, sponsored a 3,000-mile round-Britain walk which Mr. Ernest ("Sandy") Powell completed on September 27. Every day during his walk Mr. Powell sustained himself with the company's energy food Honeygel.

Formula Change. — Horlicks, Ltd., Slough, Bucks, are making a change in the formulation of their Pristacin bactericidal chewing gum. Hitherto, the product has been made available in foil-wrapped pieces each containing 4 mgm. of cetyl pyridinium chloride and 10 mgm. of sodium propionate. In the new formulation sodium propionate has been omitted.

New Distributors. — CIBA Laboratories, Ltd., Horsham, Sussex, announce that they are to handle the future marketing and distribution of the wide range of "tamed iodine" products manufactured by West Chemical Products, Ltd., including Iosan, a dairy detergent, and Wescodyne, a broadspectrum detergent-germicide. The first step in CIBA's marketing plans will be to widen distribution.

Distributors to Include Pharmacists.—Aquafilter International, Ltd., 51 Clapham Road, London, S.W.9, state that they are now selling their Aquafilter water-activated disposable plastic cigarette filter through retail chemists. The Aquafilter, which the manufacturers claim removes an average of 77 per cent. nicotine and 70 per cent. of tars from "leading" cigarettes, is sold in air-tight foil packets that retain the moisture content.

Revision of Range.—Roussel Laboratories, Ltd., Columbus House, Wembley Park, Middlesex, announce a revision of their range of Sterogyl products. Sterogyl-15 oral alcoholic is to be supplied in a new style pack of three ampoules. When present supplies of the single and six ampoule packs are exhausted all orders will be filled with the new pack. Sterogyl injectable and Sterogyl dragees are discontinued and stocks are now exhausted.

French Perfume Promotion. — The Society of French Perfumers (members: Balmain, Caron, Chanel, Coty, Guerlain, Le Galion, Houbigant, Lancome, Lanvin, Lubin, Marquay, Millot, Molyneux, Jean Patou, Revillon, Vigny, Worth) is launching a 1962 French perfume promotion in conjunction with Vogue magazine. The promotion is understood to be the most ambitious that the Society has yet attempted. Chemists all over the country are among those who will be participating. The launch is timed for October 15.

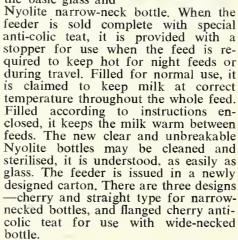
Agents in Scotland.—Dalmas, Ltd., 215 Charles Street, Leicester, have appointed Jackel & Co., Ltd., Shuna Place, Maryhill, Glasgow, N.W., to act as the company's agents in Scotland for pharmaceutical products and Mimosept sanitary towels as and from October 1.

Owing to warehouse extensions being incomplete until January 1, 1963, only small stocks will be carried at their premises to meet urgent needs. During that time quick delivery service will be made from Leicester. Afterwards all supplies will be dispatched ex Glasgow warehouse.

An Experiment That Succeeded. — J. Bibby & Sons, Ltd., King Edward Street, Liverpool, report that their experiment of selling assorted toilet soaps in a bag has had "astonishingly successful" results. By eliminating packaging and promotion costs they are able to market five assorted toilet soaps for 2s. 9d., thus giving the housewife a saving of approximately three-halfpence per bar. The latest sales figures show that they have achieved over 1 per cent of the toilet soap market with their assorted soap packs. In addition, they are continuing to market a wide range of toilet and household soaps as well as soap flakes and powders.

"Ace" of Baby Feeders.—The Feedrite Supreme baby feeder is claimed

the manufacturers, Feedrite, Ltd., 300 Kingston Road, London, S.W.20, to be the "ace" of feeders. Its outer container is streamlined in pink and blue polythene and virtually unbreakable. Its insulation pad set is easily cleaned and made sterile, and there is a choice of inner bottles apart from the basic glass and



Distributors Appointed.—Gascoigne-Crowther, Ltd., Caversham Laboratories, Reading, Berks, have made arrangements under which Scott & Bowne, Ltd., 50 Upper Brook Street, London, W.1, become the sole distributors of Napisan throughout the United Kingdom. Messrs. Gascoigne-Crowther will thus be able to concentrate upon product research, development, manufacture, packaging and the publicity and public relations activities connected with them. The new arrangement has been timed to coincide with the introduction to the market of a new Gascoigne-Crowther speciality, Nabactin,

for the sterilisation of babies' feeding

Assorted Fingernails.—Eylure fingernails in autumn pink, natural pink, pink pearl, dusky rose, coral, rose mist and carnation clear are marketed by Eylure



Accessories to Beauty, Ltd., 60 Bridge Road East, Welwyn Garden City, Herts. They are sent out in box complete with adhesives and removers and nail-varnish remover. New to the Eylure range are the Erida fingernails, sixteen in box, in colourless nylon.

New Cosmetic Company.—Continental Cosmetics, Ltd., 88 Fonthill Road, London, N.4, are introducing a range of high-quality cosmetics imported from France, Italy and other European countries. Mr. Hans Hofer, founder of the company, states that he believes in a partnership between the retail pharmacist and the manufacturer based on sincerity, goodwill and service, and his policy is "to equate the highest possible quality with rapid turnover and high returns."

Bonus Offers

JOHN BELL, HILLS & LUCAS, LTD., Oxford Works, Worsley Bridge Road, London, S.E.26. Lotil. Thirteen invoiced as twelve on order for 3 doz.; 5 per cent. on £5 order (which may include other John Bell specialities).

THOMAS CHRISTY & Co., LTD., 152 North Lane, Aldershot, Hants. Christys emulsion (tube, 2 oz. or 6-oz. bottle). Twelve invoiced as eleven, forty invoiced as thirty-six.

GEIGY PHARMACEUTICAL Co., LTD., Manchester, 23. Desogen lozenges. Eighteen boxes on order for 6 doz., ten boxes on order for 4 doz.; four boxes on order for 2 doz.

HORLICKS, LTD., pharmaceutical division, Slough, Bucks. Pristacin bactericidal chewing gum. Twelve invoiced as ten

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD., Dagenham, Essex. Phensedyl cough capsules. Thirteen to doz. Until January 31, 1963.

TOBAL LABORATORIES, LTD., Queen-borough, Kent. Antussin cough treatment. Sixteen invoiced as twelve on order valued £11 0s. 6d. Direct or through wholesalers. Till October 26 (when television campaign commences).

INFORMATION WANTED

The Editor would appreciate information about:

Sellors salve

Aerofac canine Anisect tablets

NEW PRODUCTS AND PACKS

Pædiatric Tablets. — Beecham Research Laboratories, Ltd., Great West Road, Brentford, Middlesex, introduced on October 1 Penbritin pædiatric tablets each containing 125 mgm. of ampicillin. The scored tablets are packed in canisters of twenty and 100.

Cream and Ointment. — Imperial Chemical Industries, Ltd., pharmaceuticals division, Alderley Park, Macclesfield, Ches, draw attention to two new Synalar preparations: Synalar-N cream and Synalar-N ointment. In each product neomycin sulphate is included for its antibacterial action. The other ingredient is fluocinolone acetonide. The packs are a 5-gm. and a 15-gm. tube.

A New Veterinary Pack.—CIBA Laboratories, Ltd., Horsham, Sussex, announce the introduction of a new 100-mil multidose vial of Vetisulid for the treatment of bovine metritis. Vetisulid is "a powerful sulphonamide" claimed effective against coliform bacteria and streptococci. It is understood to be absorbed and eliminated rapidly, and to be well tolerated both systemically and locally.

A Plastic Container. — Selto (Eastbourne), Ltd., Hampden Park, Eastbourne, have produced a new plastic container for their Selto dental salt tooth-powder. The container is made of high-density polystyrene. The body of the container is white, with a blue screw cap bearing white lettering. The company point out that Selto has for many years included fluoride in the formula. Selto is distributed in the United Kingdom by Owsel Distributors, Ltd., 13 Midland Street, Hull.

Presented in Capsules. — Phensedyl cough capsules are claimed by the manufacturers to be a convenient new presentation of a widely appreciated product. Each capsule contains promethazine hydrochloride, B.P., 3.6 mgm.; ephedrine hydrochloride, B.P., 7.2 mgm., and Noscapine, 12.5 mgm. Phensedyl capsules are within P.1, S.7 of the Poisons Regulations and may therefore be sold by pharmacists without prescription. The distributors are Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, Essex.

Quadrupled Activity.—Beecham Research Laboratories, Ltd., Great West Road, Brentford, Middlesex, announce the introduction of Orbenin, an oral penicillin claimed to be effective against

Orbenin

250 mg

Driver

Orbenin

10 464

10 464

250 mg

resistant staphylococci and having an activity at least four times greater than that of methicillin. Orbenin is available in 250-mgm. dual-coloured (black/orange) capsules packed in canisters of fifty and 250 and in vial of 250 mgm. to be made up for intramuscular injection by the addition of 1.5 mil water for injection B.P.

A Change of Size.—Riker Laboratories, Ltd., Loughborough, Leics, announce that, from October 1, Medihaler products will be issued in a new 15-mil (300-dose) vial, when no further supplies of 10-mil vials are available. For a period following the introduction of the new-size vials, chemists will normally be remunerated at the rate for the 10-mil vial. It has been agreed with the Central N.H.S. (Chemist Contractors) Committee and with the Ministry of Health that when the 15-mil vial is supplied chemists should endorse prescriptions accordingly, when the higher remuneration will be made and that arrangement will apply until stocks of the 10-mil vial held by chemists are exhausted.

For Treatment of Gastric Complaints.—Norma Chemicals, Ltd., 198 Finchley Road, London, N.W.3, have introduced a new "ant-acid, sedative, anti-spasmodic tablet," under the title Panturon. The products are claimed to bring immediate relief from pain and discomfort in cases of hyperacidity and to be ideal for the prophylaxis and treatment of peptic ulcer and gastric hyperacidity. Each tablet contains atropine sulphate, B.P., 0.05 mgm.: papaverine hydrochloride, B.P., 5 mgm.; aluminium hydroxide gel dried, B.P.C., 175 mgm.; kaolin light, B.P., 50 mgm.; magnesium carbonate heavy, B.P., 90 mgm.; magnesium trisilicate, B.P., 175 mgm.; and peppermint oil, 0.5 mgm. The tablets are issued in packs of fifty and 300.

Safety Glasses Free From Fog.-British American Optical Co., Ltd., 39 Hatton Garden, London, E.C.1, have studied the problem of cleaning safety glasses and keeping them free of fog and claim to have pro-vided the answer in their B.A.O. cleaning and de-

misting cabinet, a compact all-metal unit that houses cleaning and anti-mist aerosol fluid with "built-in" solvent that takes care of dirt and grease on the lenses and deposits an anti-mist compound as a thin, clear film. A quick wipe and polish with a tissue taken from a self-feeding pack, it is claimed, completes the job and leaves the lenses clear and bright and resistant to fogging.

Veterinary Products.—Beecham Research Laboratories, Ltd., Great West Road, Brentford, Middlesex, announce the introduction of two veterinary products. Orbenin, a veterinary penicillin

effective against resistant staphylococci, and bactericidal to a wide range of gram-positive organisms and Penbritin, a broad-spectrum penicillin for veterinary use, and bactericidal to both Gram-positive and Gram-negative organisms. Orbenin is available as an intramammary suspension in carton of twelve tubes. Orbenin veterinary injectable, 250 mgm. is issued in boxes of five vials, with five vials of diluent, Penbritin veterinary capsules, 50 mgm., in canisters of 100.

Anti-epileptic Agent.—For the management of petit mal epilepsy, and in combination with other anti-convulsants where grand mal is also present, to effect selective petit mal control. Simatin, issued by Geistlich Sons, Ltd., Melrose Avenue, Chester, is given only under medical supervision; the average daily dose is 4-6 capsules (initially 1-2 capsules). Each capsule contains ethosuximide 250 mgm.; they are issued in packs of 100 and 1,000. Simatin syrup, containing ethosuximide 250 mgm. per 5 mils, raspberry flavour, is issued in packs of 100 mil, 500 mil, 2,000 mil.

No Belt Needed.—Macdonald & Son, Ltd., Portland Mill, Ashton-under-Lyne, Lancs, are marketing a full range



of Silcot sanbriefs in addition to santowels and belts. The Silcot Chic brief, recently introduced, eliminates the need for a sanitary belt. Both belts and briefs are attractively packaged and pre-priced for self-selection.



EXPANSION PLANS

PLANS for the construction of a pharmaceutical factory at Al Jadida, sixty miles south-west of Casablanca, Morocco, are in their final stage, says Franco Mantegazza, a representative of the Bonomi and Lepetit Franco-Italian group. The factory should employ about 100 workers and manufacture or process antibiotics, tropical disease medicines, veterinary and other products. He says the factory will be run by Italian technicians who will train Moroccans for key posts.

N.H.S. CONTRACTORS' REMUNERATION

New "on-the-spot" check by industrial consultants

AFTER protracted negotiations, the Central N.H.S. (Chemist Contractors) Committee and the Ministry of Health have agreed in principle on the form of inquiry to be carried out by Industrial Consultants, Ltd., in connection with the Committee's claim for increased National Health Service remuneration.

The new inquiry is to be simpler than, and conducted in a different way from, previous ones (which produced so little response from private chemists). Instead of requiring the pharmacist to keep a record of the time spent on dispensing, etc., by each member of the staff, the services of trained "on-the-spot" observers will be used in much the same manner as the "chairside" inquiries carried out in connection with dentists' remuneration. The observers will spend one day at each of the pharmacies concerned, so interfering as little as possible with the work of the pharmacy.

Each pharmacist in the survey will be asked to pass to his accountant for completion an income and expense analysis return. He will himself be asked to complete a simple return of size of premises and the wages and salaries paid to staff during twelve months. The Central N.H.S. Committee will pay the accountant's fees and will also make a payment of five guineas to the contractor in recognition of his co-operation in the inquiry.

The Committee emphasise that the financial information provided will not be seen by anyone connected with them, the Ministry of Health, or the N.P.U. "in a form that enables the

particular chemist to be identified." As is the case with the Board of Trade census the information will be transposed under code numbers for statistical processing. "The observers will not disclose to anyone anything they may have learned whilst in the business, other than the timing information, etc., needed for the inquiry." Every effort is to be made by Industrial Consultants,

Ltd., to ensure a 100 per cent. response. The "timing" investigations are to be carried out in October and early November. The income and expense, etc., information will be collected as soon as possible after the questionnaires have been circulated in December. Analysis of the information will be completed as speedily as possible and the Committee envisage that they and the Ministry should have the results as a basis for negotiation in the early spring of 1963.

Correspondence

N.H.S. Remuneration

SIR,—After having had some correspondence with my Member of Parliament, in protest at the cuts imposed by the Minister of Health, and receiving little satisfaction, other than discovering that the Members receive a handfrom the Ministry by way of answer to their questions (and containing half truths which mislead them) I have been successful in having the following resolution accepted by the committee of my ward, and later by the divisional executive committee of the Conservative Party. It has also been accepted by the South-east Area Committee responsible for accepting resolutions for the party conference at Llandudno in October, and now the resolution has gone forward for printing in the official handbook of the Conference. Pharmacists may like to contact their local Party representatives to seek support for the resolution, which seeks only to help our profession. The resolution is:

"THAT this Conference expresses its deep concern that the Ministry of Health should have imposed a serious cut in the remuneration of pharmacists dispensing prescriptions under the National Health Service, and calls upon the Government to demonstrate that the Conservative party is concerned to see that professional men rendering services far beyond the call of duty should receive proper professional remuneration for their work."

E. NEVILLE BROWNE,

Not the Way to Treat a Friend

Esher, Surrey

SIR,—We read, more in sorrow than in anger, the remarks of your correspondent "Jason" (C. & D., September 29, p. 356). Though there would appear to be some lack of logic in the present position, as a result of the introduction of the 14-oz. size of Optrose, at 4s. 6d., as compared with the 8-oz. size at 2s. 6d., that is only because "Jason" has not all the facts. This is no fault of his, but how much better if "Jason" had written to us. Surely this is not the way to treat a "friend": after all, we have been the chemist's friend for more years than we care to remember. All we ask is that "Jason" and others like him, if they have any problem concerning our products, should first check up before writing to the Press.

KELDON, LTD., H. M. SEWARD, Managing director

CHEMIST AND DOCTOR CENSURED

Private patients supplied with N.H.S. drugs

THE Joint Services Committee, London Executive Council, investigating recently the circumstances relating to medical records of patients, found that there had been an "arrangement," over a considerable period, among four doctors who treated private patients, another doctor and a chemist contractor, whereby 113 private patients had been enabled to obtain under the National Health Service drugs and appliances to which they were not entitled. The members of the Committee in a report stated that the prescriptions had been issued by one of the doctors on forms EC10 for patients who, though on his list, were not under treatment by him, but by the four other doctors as private patients.

The Committee found that 395 private prescriptions containing 639 items had corresponding 395 EC10 forms, all of which bore the stamp of the respondent chemists for which they had received payment from the London Executive Council. In each case the patient was first provided with private prescriptions by his private doctor and those were covered by official forms EC10 by the doctor subsequent to the supply of the drugs and appliances by the chemists. The Minister of Health has approved the committee's recom-

mendations that the doctor who issued the prescriptions should be severely censured and £200 be withheld from his remuneration. The chemists should be censured and £50 should be withheld from their remuneration.

The Committee was extremely perturbed at the situation brought to light by its investigations and added "It may well be that matters of unethical conduct are involved which are outside the jurisdiction of the Executive Council and the Minister of Health." The Committee therefore recommended that a copy of the report should be sent to the General Medical Council and to the Pharmaceutical Society "for such action as they may consider appropriate." The doctor and superintendent pharmacist on legal advice declined to give evidence but made statements. The pharmacist said that the most that could be said of his company was that it anticipated the receipt of EC10 forms. The company had never claimed payment under the National Health Service Acts for drugs and appliances supplied other than those in respect of which EC10 forms had been provided. Furthermore every patient to whom drugs were supplied was under treatment by the respondent doctor.

Proposals in the "Report"

SIR,—We have been asked to discuss at branch meetings the report on the Practice of Pharmacy. There is in my opinion very little to discuss. The report is aimed at raising the professional status of pharmacy, at the expense of the business side. This is all very well, and I am sure we would all agree with the report, providing we could all get a good remuneration from our professional activities. This, however, is not so at the present time, and we each have to pursue our business activities as best we can to ensure ourselves a decent living. With many of our traditional lines being sold elsewhere, and the threatened abolition of retail price maintenance looming over our heads, any restriction on our methods of carrying on our businesses, such as those proposed by "the report," may well be disastrous to many small businesses. The time to discuss changes such as are suggested in "the report" is when we can be ensured of a good income from our professional activities with an assurance of security for the future.

J. D. GLASSMAN London, E.7



For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at 28 Essex Street, Strand, London, W.C.2

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

TELEPHONE: CENTRAL 6565

Overseas Trade in August

UNITED Kingdom exports of drugs, medicines and medicinal preparations during August, valued at £4,016,392, were at their lowest level since February and a little over £200,000 below the average monthly value for the year. However, in previous years, such exports have tended to flag during the summer months and pick up from October onwards so that there are good prospects

that 1962 will prove to be another record year.

The value of prepared medicines shipped to Australia during August was £352,866 or £117,000 more than in July and £80,000 more than in August 1961. The value taken by Nigeria, the second best market, at £254,575 showed little change from the previous month or from August 1961. New Zealand was close behind Nigeria with purchases at £232,278, while the Irish Republic came next with £180,951, again little different from August 1961. The aggregate value of the Republic's purchases to date, however, is about £100,000 up on the same period of last year. Sales to the European Economic Community at £331,000 were about £50,000 down

EXPORTS				VALUE
′				£
Drugs, medicines, medicin	al p	reparat	ions	. 046 202
(total)	• • •	• • •	•••	4,016,392
Vitamins	• • •	• • •	• • •	288,888
Penicillin in bulk	• • • •		•••	104,274
Penicillin injections				71,857
Penicillin tablets, ointments	š			58,902
Antibiotics other than pen	icillin			492,221
Alkaloids	• • •			105,685
Aspirin				101,463
Anæsthetics (excluding et	her,	chlorof	orm	
and ethyl chloride)				87,984
Antihistamines				46,416
Antipaludics				94,421
Barbiturates				43,543
Ointments and liniments				119,913
Insulin				34,900
Hormones				156,125
Sulphonamides, prepared				83,667
Proprietary medicines				1,106,971
Unclassified medicines				959,866
Glycerin				20,174
Acetone				23,629
Citric acid				58,439
Essential oils, natural, exclud	ling tu	rpentin	ie	74,900
Sulphonamides, unprepared				73,797
Perfumery and toilet preparat				,
Lipstick, face powder, etc.				268,185
Dentifrices				110,611
Waitet anne		•••	0	289,711
Countly ation of atomorphic				723,057
Synthetic detergents				, 20,00

I	IMPORTS								
						£			
Vitamins						37,847			
Antibiotics						57,191			
Alkaloids						60,256			
Proprietary medicia	nes					80,651			
Unclassified medic	ines					165,002			
Borax						97,390			
Iodine						7,131			
Menthol						26,096			
Essential oils:						ŕ			
Bergamot .						6,032			
Citronella .						28,390			
Clove						6,291			
Geranium .						15,245			
Lavender .						2,797			
Lemon						16,495			
Orange						9,291			
Pennermint						69,371			
Unclassified						222,972			

on the previous August, only Belgium showing any improvement. Sales to three of the countries in the European Free Trade Association totalled £206,000 or some £50,000 less than in August 1961, despite higher purchases by Sweden.

Imports of prepared medicines totalled just over £400,947 of which £80,000 was attributed to proprietary medicines. Export-import figures for various commodities for August are given in the accompanying table.

Compensation for Tenants

ONE feature of the Landlord and Tenant Act, 1954, not understood by some traders is that, when the tenant of business premises is refused a new tenancy by his landlord, he may appeal against the refusal to the county court. If the court does not grant the tenancy, he is then, on quitting, entitled to a compensation, in respect of giving up the premises, equal to once or twice the net annual value. That point should be borne well in mind by traders who have local authorities as landlords, and whose premises are in areas of proposed redevelopment, where the chance of obtaining a renewal of tenancy from the county court is remote. Despite the remote likelihood of success of such an application, it is worth the tenant's while to apply simply in order to get the compensation which though small enough, is better than nothing. Some local authorities are now paying the amount of compensation without the tenant's having to take High Court proceedings. Brighton Corporation, for example, which is frequently terminating tenancies as development proceeds, argues that such a course saves time and costs and is of assistance to the tenant as well as the corporation.

CHIPPINGS AND DROPLETS

From the C. & D., October 15, 1868

MERE TRADERS

THE position of the British pharmacist has long been a source of wonder to his continental brethren. The French pharmacien, who boasts of a status only inferior to that of the medical man, cannot understand how it could have happened that the State, and, indeed, society generally, have so long looked upon such men as John Eliot Howard, Daniel Hanbury, H. B. Brady, Henry Deane, W. W. Stoddart, G. F. Schacht, and a host of others as mere traders and shop-keepers. They point proudly to their Robiquets, Coubeirans, and Delondres, and ask if they would receive as little recognition as men of science as the gentlemen we have named, had they belonged to England instead of to France.

MEDICAL ABSTRACTS

ORAL PENICILLIN AGAINST STAPHYLOCOCCUS

An indication of the clinical value of the orally active isoxazolyl penicillins, and in particular of the derivative BRL 1621*, against penicillinase-producing staphylococci is given in four research papers published simultaneously in the British Medical Journal (1962. II. 831) and Lancet (1962. II. 632, 634, 640). From Guy's Hospital, London, Knox and colleagues report a comparative assessment of BRL 1621 (chemically, 3-o-chlorphenyl-5-methyl-4-isoxazolyl penicillin), BRL 1577 (3-p-chlorphenyl-) and BRL 1400 (3-phenyl-); the last-mentioned compound is available in the United States as oxacillin†. Clinically BRL 1621 was slightly superior to, and produced higher serum concentrations than, BRL 1577. In vitro it was the most active, with a potency up to ten times that of methicillin‡, and it also proved more effective than BRL 1577 or 1400 against a naturally occurring methicillin-resistant strain of staphylococcus. Those results agree with the manufacturer's report of animal studies that showed BRL 1621 active by mouth or intramuscular injection and without toxic effect; serum concentrations proved higher and more prolonged than with oxacillin. The recommended oral dosage for adults is given as 500 mgm. every 6 hours (before meals); intramuscularly, the corresponding dose is 250 mgm., 4-6 hourly. A collective report from six hospitals, where the compound was used against severe staphylococcal infections, confirms the effectiveness of that oral dosage level (=20-40 mgm. daily per kilo of body weight); children required slightly higher dosage (50 mgm. per kilo). Finally, in controlled trials at Birmingham Accidents per kilo). Finally, in controlled trials at Birmingham Accident Hospital 62 per cent. of burns were cleared of Staph. aureus during a seven-day course of treatment with BRL 1621, compared with 10 per cent. cleared without antibiotic therapy. Str. pyogenes was removed equally well from all sites within five days by oral BRL 1621 or by intramuscular methicillin.

*Orbenin, ‡Ceibenin (Beecham Research Laboratories, Ltd.), †Prostaphlin (Bristof Laboratories).

NEW BOOKS

Drugs, Medicines and Man

H. BURN. George Allen & Unwin, Ltd., 40 Museum Street, London, W.C.1. Pp. 232. 25s.

Professor Burn, in this fascinating chat about clinical pharmacology, sprays his text with an abundance of practical data, much of American origin, concerned with diagnosis and treatment. The review of drugs, though far from complete, gives the reader an idea of the widely varied lines of research pursued in the conquest of disease.

Jordan's Income Tax Guide 1962/63

CHARLES W. CHIVERS. Jordan & Sons, Ltd., 116 Chancery Lane, London, W.C.2. 7 x $4\frac{3}{4}$ in. Pp. 56. 2s. 6d. (paper back).

THE Guide includes an explanation of the new tax on short-term gains brought in by the Chancellor of the Exchequer in the April Budget. Details are also given on rates and allowances for 1962-63; returns—assessments—appeals; Payas-you-earn with worked examples, and full tables of income tax and surtax.

The Givaudan Index

Givaudan-Delawanna, Inc., New York. In the United Kingdom: Givaudan & Co., Ltd., Godstone Road, Whyteleafe, Surrey. $9\frac{1}{4}$ x 6 in. Pp. 430.

New features in this, the second, edition include flash points and a colour index for most of the products described. The section classifying products according to odour types has been completely revised and enlarged and a section on the classification of chemicals by functional groups has been added. The original purpose of the book—to present specifications and standards of basic aromatic chemicals produced by the company has been continued.

Wine Making from Fruit Pulps and Concentrates

S. M. TRITTON. The Grey Owl Research Laboratories, Almondsbury, Glos. Pp. 18. 2s. 6d.

THE author, a pharmacist, is already well known among those who practice the art of wine making. She has pro-

duced two other books on the subject, and the laboratory from which her work emanates is the supplier (direct or through stockists) of various pulps, juices, yeast cultures, etc., used in the production of wines. This publication describes how the amateur can successfully make his own wines from fruit concentrates of apple, grapefruit, orange and grape, and from the pulps of apricot, peach, pineapple and plum. Six inexpensive items of equipment are listed as a minimum requirement.

Dr. Timothie Bright, 1550-1615

SIR GEOFFREY KEYNES. The Wellcome Historical Medical Library, 183 Euston Road, London, N.W.1. $9\frac{3}{4}$ x $7\frac{1}{4}$ in. Pp. 47. 21s.

This is the first of a new series of publications of the Well-come Historical Medical Library in which Sir Geoffrey Keynes has surveyed the life of Dr. Timothie Bright who was appointed physician to St. Bartholomew's Hospital in 1585. Dr. Bright believed that the hospital apothecary should "finde only such medicines and drinkes as are administered inwardly unto any of the poore" while the surgeons should provide all outward applications. The book, however, deals more extensively with Bright as the author of "A Treatise of Melancholy," which Sir Geoffrey Keynes considers should "take its place as a lesser star alongside one of the great stars of English literature." There is also the suggestion that Bright's treatise had been read by Shakespeare. "Some of the most famous sentences in the English language find their prototypes in Bright." Later Sir Geoffrey Keynes provides further information of the doctor's "charactery," a shorthand cipher for which he received letters patent in 1588. The book contains a bibliography of Bright's "writings" and is adequately indexed.

Advertising in Action

RALPH HARRIS and ARTHUR SELDON, The Institute of Economic Affairs, 66A Eaton Square, London, S.W.1. 8 x $5\frac{1}{2}$ in. Pp. 346. 30s. (paperback edition 7s. 6d.).

THE dust sheet of this book accurately proclaims "Seventy more or less detailed case histories on a wide variety of products have been assembled for the first time relating expenditure on advertising to sales. There is much to fascinate, interest and instruct not only the advertising expert, but also the general reader and the consumer." In the chapter headed "Chemists' goods" the following eight items have been investigated:—Bronco toilet tissue; Kleenex tissues; Brylcreem in the United States of America; Dettol antiseptic; Gillette razor blades; Macleans tooth-paste; Panadol and a shampoo. However, pharmacists will find data of interest in other chapters of the book. The author, after reviewing the case histories, concludes that "although it may be wasteful because it is not yet a scientific instrument, and although it may sometimes excite demand by improper appeals to fear, greed, envy or by cynical exploitation of sex, advertising is yet one of the most dynamic influences in making the economy progressive. It is difficult to visualise a substitute for it that not only avoids its weaknesses, but also embodies its advantages."

Pharmaceutical Society of Ireland MONTHLY MEETING OF COUNCIL

(Concluded from C. & D., September 29, p. 361)

The following changes of address were noted: Mrs. Mary Dillon, to Rockbrook, Uam Var Estate, Bishopstown, co. Cork; Dr. J. Green, to 4 St. Mary's Avenue, Hendon Lane, Finchley, London, N.3; Dr. T. K. O'Leary, to 236 The Broadway, Dudley, Worcs; J. F. Shine, to Main Street, Wicklow; T. Toohey, to Harbour Street, Tullamore; J. A. Underwood, to 30 Bolton Street, Dublin; R. Hanna, to 20 Farmhill Park, Goatstown, Dublin; J. Dillon, to Rockbrook, Uam Var Estate, Bishopstown, co. Cork; P. J. Geoghegan, to Ardbear, Retreat Road, Athlone, co. Westmeath.

THE REGISTRAR reported on the deaths of Thomas Connolly, M.P.S.I., John F. Nolan, L.P.S.I., and Albert Browne, L.P.S.I.

Members of Council present were Messrs. H. P. Corrigan, C. J. Cremen, Miss L. Cunniffe, Messrs. J. Gleeson, V. G. McElwee, T. R. Miller, J. J. O'Regan, G. C. O'Neill, M. Power, R. J. Power, F. J. Robinson and R. J. Semple.

Grants totalling £74 were passed for payment at a meeting of the Benevolent Fund that followed.

From Apothecary to Pharmacist

A STUDY OF CHANGES OF TITLE T. D. WHITTET, B.Sc., Ph.D., F.P.S., F.R.I.C.

2. TITLES USED IN GREECE AND ITALY

GREECE

SINCE the titles probably originated in Greece it is of especial interest to examine the trend of events there. Good 1796) states that, though the term apothecary is of Greek origin, it was not used by the ancient Greeks for the practitioner of pharmacy, although APOTHECA was sometimes applied to the shop or repository where he kept his drugs. According to Good the names PHARMACEUTA, PHAR-



Sign over a modern Greek pharmacy,

MACOTRIBA, PHARMACOPOLA and PHARMACOPAEUS were used almost indiscriminately for the pharmacist, though they have a fine shade of difference of meaning, being respectively a dealer, a dispenser, a vendor and a compounder of medicines.



Signboard of a modern Greek pharmaceutical wholesaler.

Turning to modern usage, the secretary of the Panhellenic Pharmaceutical Society has informed me that the word PAPMAKON (PHARMAKON) is still used for a drug whilst the retailer of drugs is ΦΑΡΜΑΚΟΠΟΙΟΣ (PHARMAKOPIOUS) and his pharmacy is PAPMAKEION (PHARMAKION). The word for store is now ADOOHKH (APOTHIKI) and thus the shop where drugs are sold by wholesale is the PAPMAKATOOHKH (PHARMA-KAPOTHIKI), a word derived from both pharmakon and apotheke of the ancient Greek. An alternative word for the wholesale drug store is ΦΑΡΑΜΑΚΕΜΠΟΡΕΙΟΝ (PHARMAKEMPORIUM) from which is derived the name of the wholesaler of drugs ΦΑΡΜΑΚΕΜΠΟΡΟΣ. The ending emporos means merchant. The word AΠΟΘΗΚΑΡΙΟΣ (APOTHIKARIOS) means a storekeeper. Thus in Greece the equivalent of the English word apothecary has retained its original meaning of storekeeper whereas in many other countries it acquired the specialised meaning of keeper of medicines and later preparer of medicines.

ITALY

ALTHOUGH Italy was one of the earliest countries to adopt the word apothecary its use does not seem to have become general there. The Latinised form of APOTHEKA is APOTHECA, and that was used for some time for the pharmacy and APOTHECARIUS for the pharmacist. The spelling APOTECARIUM also appears to have been used. In the statutes of the Guild of Pharmacists in Milan in 1390 we find APOTHECARII SIVE SPETIARII, but two centuries later the statutes speak of "aromatarii sive speciarii."

It seems that many different names were used to designate the pharmacist in ancient Italy, e.g. SPECIARIUS, RHIZOTOMES, AROMATARIUS, HERBARIUS, UNGUENTARIUS, SEPLASIUS and PIGMENTARIUS. As those names suggest, the tasks undertaken by these practitioners were varied and included the preparation and/or sale of spices, perfumes, ointments, paints, etc.

Good (1796) considers that the terms SEPLASIUS and PIGMENTARIUS were only in general use for perfumers who supplied pomades, paints and perfumes to the ladies of Rome. The apothecaries used several of those articles and purchased them from these vendors, as well as from the PANTOPOLAI and CATHOLICOI, who were general merchants or importers. It appears that drugs and spices were often sold in the same shops as those cosmetic products, etc., and hence all those terms have sometimes been used indiscriminately for the apothecary. Good also mentions that Galen used the term MIGMATOPOLAI for a vendor of compounded medicines. Galen in one of his works refers to Asclepiades Pharmacion who wrote a treatise of ten volumes on medicine. Andre-Pontier (1900) mentions the use of the terms PHARMACEUTAE and PHARMA-COPOLAE in ancient Italy. Fialon (1920)



Entrance to a modern Italian pharmacy. [Courtesy, Dr. Carlo Marini (president, Federazione Ordini Farmacisti Italiani)].

states that, at the time of the School of Salerno in the eleventh century, CONFECTIONARIUS was reserved for practitioners who dispensed prescriptions and STATIONARIUS for those who were solely retailers of drugs. Florentine Pharmacopæia contains requirements for the premises of a pharmacy which it calls BOTTEGA DELLA SPEZIALE. The term ARTE DEGLI SPEZIALI was used in that period for the pharmaceutical profession in Florence, whilst the title COLLEGIO DEGLI SPEZIALI was used for the pharmaceutical societies of Venice, Piacenza, Lucca, Perugia and many other cities.

On the other hand, in Milan, Rome and some other towns, pharmacists were called AROMATARII from aroma (perfume). In general the professional activity of those practitioners was described as ARTE AROMATARIA, ARTE FARMACEUTICA and ARTE DELLA SPEZIEVIA. Sometimes the name CONFECTIONARIUS was used (for example by Frederich II in 1240) for pharmacist and STATIO for pharmacy.

The change of title to FARMACISTA and FARMACIA took

place during the nineteenth century. It was influenced by the movements for the unification of Italy and the need for the introduction of more uniform qualifications and greater specialisation. In Northern Italy pharmacy was affected by Austrian pharmaceutical legislation between 1780 and 1840 and much of the rest of the country came under French influence during the Napoleonic Wars.

After the constitution of the Kingdom of Italy the titles FARMACISTA for the pharmacist and FARMACIA for the pharmacy became general and the others disappeared.

Andre-Pontier, L., Histoire de la Pharmacie, Paris, 1900, 58.

Barrett, C. R. B., The History of the Society of Apothecaries of London,

Elliot Stock, London, 1905.
Copeman, W. S. C., Doctors and Diseases in Tudor Times, Dawsons of Pall Mall, Lond., 1960.
Daems, W. F. (1956), Die Termini Apoteca und Apotecarius im Mittel-

alter; Internat. Gesell. fur Gesch. Pharm. (1956, 39).

Du Cange, Glossarium mediae et infirmis latinatis, Niort., 1883 (quoted by

Daems, 1956).
Fialon, C. H., Histoire des Mots Pharmacien et Apothicaire, Bull. Soc. hist, Pharm, (1920, 28).

Good, J. M., The History of Medicine as far as it relates to the Profession

of the Apothecary, C. Dilly, Lond., 1796. Grier, J., A History of Pharmacy, Pharm. Press, Lond., 1937. Guitard, E. H., Apothicaire n'est pas boutiquer, Rev. Hist. Pharm., 1949. Guitard, E. H., Proceedings of the 17th General Assembly of F.I.P.

Brussels, 1958.

Jonckheere, F. (1955), Veroffentlichung Nr. 29, Institut für Orientforschung,
Deutsche Akademie der Wissenschaften zu Berlin, p. 157.

Kremers, E., and Urdang, G., History of Pharmacy, 2nd Ed., 1951.

Schelenz, H., Geschichte der Pharmacie, Berlin, 1904.

Thompson, C. J. S., The Mystery and Romance of Alchemy and Pharmacy, Scientific Press, Lond., 1897.

Thompson, C. J. S., The Mystery and Art of the Apothecary, John Lane, Lond., 1929.
Pearce, E. H. (1916). The Monks of Westminster, A Register of the

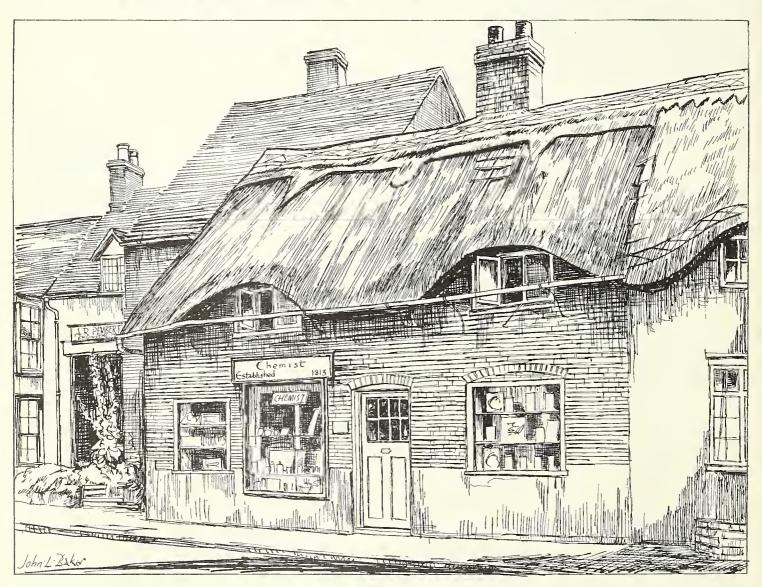
Brethren of the convent from the time of the Confessor to the Dissolution. Cambridge University Press, Cambridge.

Wilkening-Wieslock, Pharm. Zeit. (1930, 225).

ACKNOWLEDGMENTS

The author is grateful to Professor G. Sonnedecker, Wisconsin, U.S.A., for several references and for supplying a copy of the Egyptian tomb picture; and to Mr. C. M. Iounnides, F.P.S. (chief pharmacist to the Government of Cyprus), Dr. C. A. Dambergis and the secretary of the Panhellenic Pharmaceutical Society for information about the Greek titles.

PHARMACIES OF BRITAIN



A THATCHED-ROOFED PHARMACY

The branch pharmacy of Chamberlaine's (Chemist), Ltd., at 1 Southam Road, Dunchurch, Warwicks, must surely be rare in the character of its roof. It was opened shortly after the "parent" business was established in Rugby in 1813 in a thatched cottage with bow-fronted windows dating from 1750. The shop was on the old London-Birmingham coach road and closed at the coming of the railways but was reopened in 1920 at the request of the village. The bow windows lasted until 1961 when, on account of their age, they were replaced by the present frontage.

Birmingham Drug Testing Scheme

HOW IT OPERATES

An abridged version of an address given recently by Mr. F. G. Stock, M.Pharm., F.P.S., F.R.I.C. (research chemist, City of Birmingham Analytical Laboratories), to the Swausea and West Glamorgan Branch of the Pharmaceutical Society

THE Birmingham drug testing scheme commenced operation in early 1956, and is a system of quality control based essentially on co-operation between the pharmacist and the City's Health Department. We are permitted to enter any pharmacy in the City and are given information as to manufacturer, batch number, etc., of any sample taken. A liaison committee exists which has resulted in a two-way exchange of ideas. Any action taken as a result of a faulty sample is informal and, we believe, constructive in nature. Drug testing traditions in the Birmingham laboratory go back many years and it is probably true to say that our laboratory is unique in this field. The study of reports from other food and drug authorities showed an appalling inactivity in the testing of drugs and it would not be unfair to say that the range of drugs examined is still based very much on the British Pharmacopæia, 1932.

Since the thalidomide tragedy, there is now a widespread public demand for the establishment of some independent authority to test and licence new drugs. There are two aspects to drug testing; testing for safety in usage and testing for purity and conformity with official standards, Mention has frequently been made of the American Food and Drugs Administration. Both testing aspects are implicit in the American system and it would be folly to exclude testing for purity and conformity with standards from any proposed new independent authority that may be instituted in this country.

"Surprising" Government Failure

In an article on drug testing published in 1955 we called for an effective system of drug control in this country by the institution of central or regional laboratories. We of course referred only to the quality testing of drugs but, if the matter had been seriously considered with an examination of the American and Canadian systems, there is little doubt in my mind that clinical testing would have been instituted at the same time as quality testing. Clearly, the setting up of such an authority is a matter for the government of the day and the failure of successive governments to institute an effective system of drug control in this country is surprising, when one realises that in this instance the consumer has no possible means of protecting himself. In the light of experience with the Birmingham drug testing scheme I would now like to examine critically the quality testing of drugs—or rather the lack of it — existing in this country

In theory there are two methods for the quality testing of drugs: either under the Food and Drugs Act by local authorities or by the Ministry of Health testing scheme for drugs supplied on Health Service preseriptions. A number of criticisms can be made of the Ministry's testing scheme, which has no statutory powers to proceed against manufacturers, who are often solely responsible for faulty preparations supplied by pharmacists on test prescriptions. Furthermore, the analyst under the Food and Drugs Act, when no official standard exists can make his own, provided of course he is prepared to substantiate it in court. The ironical position is that the powers needed by the Ministry's testing scheme are included in the Food and Drugs Act.

A Test of the Pharmacist

Recently the scope of the Ministry's testing scheme was extended to include proprietary medicines. This could be a step in the right direction but I was appalled at the Ministry's approach to the problem. Where the proprietary exists in one strength only, a simple identity test will be made. Where there are two or more strengths, the active ingredient will be estimated to establish whether or not the prescribed strength has been supplied. This surely is a test of the pharmacist as to whether or not he has supplied the correct preparation and of correct strength; it is no test of the quality of the preparation itself. I made this criticism in a recent article on uniformity of weight of contents of capsules reporting a shocking lack of uniformity in the weight of contents of capsules made by a certain manufacturer. Some important drugs were involved and the weight variations in the contents of individual capsules varied from excesses of some 24 per cent, to deficiencies of some 45 per cent. As the majority of these capsules were proprietary preparations and not yet the subject of official uniformity of weight requirements, the Ministry would have passed them on a simple identity test!

From the results obtained by the Birmingham drug testing scheme during the past six years, there can be no doubt of the need for a rational and constructive system of quality testing of drugs in Great Britain. In selecting suitable samples during the initial stages of our testing scheme a method of "indicator sampling" was developed to discover, for example, how manufacturers contend with unstable prepara-tions such as penicillin, barbiturate tablets which tend to harden on storage and many other preparations where there are no obvious difficulties of manufacture. The results obtained in an examination of 125 samples of penicillin solution tablets from ten manufacturers gave thirty-eight samples which were the subject of complaint, many of which were seriously deficient — in one case over 90 per cent. One may conclude from an investigation of this nature that penicillin is an unstable substance and therefore pharmacists should be more careful in their storage but, with the full information in our possession of the 125 samples of solution tablets, sixty-three (with only one exception) manufactured by four firms were above reproach, whatever the size of pack or the length of the storage period, while of sixty-two samples of the manufacture of the remaining six firms, thirty-seven failed to come up to the required standard. Only by procuring directly from dispensary shelves specimens of the penicillin tablets used, by noting dates of purchase, storage times and conditions of supplies, and comparing the products of different manufacturers are we able to fix definitely the responsibility for defective material. Of equal importance is the fact that innocent parties can with equal certainty be absolved from blame.

Tablet Variation

We have also reported on an investigation of a total of approximately 300 samples of barbiturate tablets, which showed the startling differences exhibited betwen tablets of different manufacturers in respect of quality. Four firms were together responsible for the production of the tablets represented by eighty-three samples, and no fault could be found with any of these. On the other hand, of sixty-seven samples purchased of tablets made by two manufacturers, no fewer than forty-two had to be rejected. The most rigid discipline imposed upon themselves by companies of the standing of the first group has earned for them a reputation among medical practitioners, who know by experience that their goods can be consist-ently relied upon. If the same could be said of all the manufacturers of standard pharmacopæial preparations, the Ministry of Health would have a good case for asking doctors to prescribe, wherever possible, standard articles rather than the proprietary ones listed by certain first-class firms. However, in the absence of an adequate and effective system of quality testing, the prescribing of the standard preparation could result in patients receiving in some cases unsatisfactory products. However, it should be emphasised that the products of some standard drug manufacturers are equal to the best that any proprietary manufacturer can

A similar pattern emerged from our examination of the sulphonamide group of drugs. In contrast to the barbiturate group where manufacturing problems related to physical properties are encountered, and the penicillin example, which raised the question of chemical deterioration, the "sulpha" group do not normally suffer from either of these defects. However, we still found complaints which followed the same pattern. No fewer than twenty-three complaints of quality had to be made with respect to forty-three samples of tablets made by three firms, while 152 samples of goods made by the remaining

twenty-seven manufacturers produced only eight complaints. A reported study of approximately 800 samples of galenicals and ointments produced similar results.

A comparison between the records of two selected manufacturers over a wide range of samples will best illustrate the conclusions to be drawn from this work: 131 samples from one manufacturer failed to yield a single complaint, whereas 208 samples from another source disclosed no fewer than seventy faults. Needless to say, unless the latter manufacturer can achieve the efficiency of the former, his products will tend to disappear from Birmingham—as indeed they have. My conclusions must be that the endeavours of good manufacturers to keep within required limits is the patient's safeguard against gross errors of manufacture. This initial phase of the Birmingham drug testing scheme was completed about three years ago, and since then we have kept a routine check on standard drug supplies to the city. The products of any new supplier to the city are immediately investigated. Supply patterns have changed a great deal since we started our work and there have been improvements in the products of some companies that previously caused concern. In the routine examinations constantly being performed we now only encounter the odd one or two complaints in every hundred samples analysed. It must not be forgotten that this position has been achieved in six years without a single prosecution! We now have extensive records on the products of a number of manufacturers, and also the idea of indicator sampling has taught us by experience that the testing of a relatively small, carefully selected group of preparations, over a number of batches, will give a fairly good indication of the abilities of any standard drug manufacturer.

Constructive Aspects

I should now like to take a few examples from the work of the laboratory to illustrate what I believe to be its constructive nature. We published in 1955 the results of an examination of about fifty samples of tablets of glyceryl trinitrate showing deficiencies in forty samples ranging from 26 to 57 per cent. In this case there was a considerable volume of evidence which strongly suggested that the formulation was far from satisfactory and that improper storage by the pharmacist did not play any major part in the deficiencies found. In fact the pharmacist was in the invidious position of unwittingly selling tablets seriously deficient in potency through no fault of his own. Subsequent alteration of the formula in the Pharmacopæia completely changed the situation and today there is little trouble with this preparation.

In 1960 I published the results of an investigation into stock mixtures. From this survey it was concluded that there is a place for stock mixtures in routine dispensing provided they are employed with discrimination, moderation and commonsense. Comments were made on some mixtures found to be unsatisfactory for use as stock mixtures and the use of the "puly. pro. mist." was critically assessed. It is my belief that this extensive survey, which took nearly a

year to complete, did more good than years of punitive Ministry testing of dispensed mixtures. From observations and comments made to me by pharmacists I am sure that a high percentage of Ministry test prescriptions are spotted—it may well be as high as 100 per cent. where the pharmacist has only one or no assistant. Since our experience with stock mixtures I have often wondered how many errors are made by a nervous pharmacist, knowing that it is a test, making an extemporaneous preparation rather than use his stock mixture — my advice would be trust your stock mixture!

Two investigations undertaken at the request of the local liaison committee may be of interest because of the principles involved, despite the comparative unimportance of the preparations concerned. I was asked whether there was any discoverable cause for the relatively disproportionate number of compound calamine ointments rejected on test prescriptions, invariably for excess of zinc content. A discrepancy was discovered between the formulas of the British National Formulary and British Pharmaceutical Codex. The latter makes up to weight with soft paraffin whereas the former gives a weight of soft paraffin calculated by difference. As the calamine of commerce is very close to its top limit in zinc content, preparation of compound calamine ointment using the B.N.F. formula frequently contains excess zinc due to evaporation of alcohol from the liq. picis. carb. during manufacture. Subsequently compound calamine ointment ceased to be considered a suitable preparation for testing purposes. One can only speculate on the number of pharmacists who, during the ten years' existence of this undetected discrepancy, have spent their half-days before a Committee of the local Executive Council because of a faulty official formula and in nearly every case concerning a preparation bought from a manufacturer and supplied in all good faith. Another pharmacist found himself before an Executive Council committee for supplying garg. pot. chlor. et phenol found to contain potassium chloride; an investigation suggested the source of the trouble to be contaminated potassium chlorate supplied by the wholesaler. When, also on test prescription, another experienced the same pharmacist trouble and it was discovered that he also had purchased his potassium chlorate from the same source, the solution seemed obvious.

Hospital Drug Supplies

Let us now consider the quality testing of hospital drug supplies, which I consider to be a matter of some urgency. As we have seen, the Food and Drugs Act and the Ministry's testing scheme can provide some control, in theory at least, of drug supplies obtained through retail pharmacies. Neither of these controls apply to hospitals. The Ministry, which is professedly concerned with the quality of drugs purchased by it from retail pharmacies, does not seemingly extend this concern to its hospital supplies, for at present there is no active comprehensive quality testing of the extremely wide range of important drugs used in the hospital

service. I believe this to be deplorable. We have for some time now acted as paid consultants to the Birmingham and Midland hospitals on matters relating to drug quality. Hospital pharmacists have a special responsibility in the purchase of drug supplies—if price were the only consideration the task could well be left to a supplies officer. The majority of manufacturers are pleased to show their manufacturing, research and analytical control facilities to hospital pharmacists. It would be in the interests of the patient if hospital pharmacists insisted on seeing for themselves, in cases where any reasonable doubt existed in their minds concerning the purchase of cheap drugs.

Briefly referring to Continental drugs I would say that although personally I believe the use of section 46 of the Patents Act by the Ministry to be against the long-term interests of consumers, it is in my opinion, solely from the point of view of quality, infinitely preferable to contract centrally as at present for any purchase of patented drugs from unlicensed sources, rather than to engage in the haphazard purchase of such supplies as was formerly the case. Additionally it is, I believe, the practice of the Ministry to qualitytest all batches of this small group of drugs purchased on central contract.

False Economies

I would briefly mention the results of a recent examination of some eye-drops containing an antibiotic and a corticosteroid which I consider to be a good example of what the Linstead Committee may have had in mind when, in Paragraph 63 of their report they stated, under the heading "Economy in the Prescribing of Drugs."

"We think it desirable to add a final word of caution. The drive for savings in the pharmaceutical field must not be pressed to extremes. In the attempt to reduce the growing cost of the pharmaceutical service there is a danger of sacrificing quality to cheapness, for price is by no means the final criterion by which drugs and medicines are to be judged."

We examined the products of three manufacturers, one of which was much cheaper than the other two. In the batches that we examined all three products contained the correct amount of medicaments. However, a serious complaint against the cheaper product was the difficulty we found in dispersing the material, which was reluctant to leave the bottom of the container despite the most vigorous shaking. In the case of the cheaper material only 61 per cent., 33 per cent. and 12 per cent, of the expected corticosteroid compound was found to be in suspension whereas with the products of the other two manufacturers approximately 100 per cent. of the expected values were achieved in all samples. These results are somewhat startling and the key to them I am sure is in the manufacturers' formulations good formulation must surely be in-cluded in any definition of "quality" in pharmaceutical preparations.

In recent years there has been an in-

In recent years there has been an increasing tendency for some firms when tendering for the supply of hospital drugs to submit photostat copies of certificates of analysis obtained from ex-

pert drug analysts. There can be no doubt that such a certificate represents an accurate analysis of the sample received by the analyst. However, the analyst I am sure would be the first to agree that it does not certify the product, neither of necessity does it certify the batch. This procedure is disturbing since, in my opinion, substantiated by the numerous references made in this talk to published results on some thousands of samples examined, there can be no substitute for a good inherent quality control by the manufacturer.

Unofficial Drugs

A group of drugs providing special problems is that for which no monographs exist in any recognised pharmacopæia or formulary. For this group of drugsa scheme devised locally has proved to be instructive and could be worthy of copying by other hospital groups. When inviting tenders, the manufacturer's specification for the drug itself should be demanded, together with a sample of the pure material; also a sample of the preparation and the method of assay used for its quality control. It is as well to realise that many of the assays applicable to official preparations are little more than tracer assays" often giving little information as to the purity of the original materials. An examination of specifications provided by companies seeking contracts was extremely enlightening. In many cases they were extremely comprehensive even to the extent of including oral toxicity testing. This contrasted sharply with others which were little more than identity tests.

This brings us back to the retail sphere where the same difficulties arise in the quality testing of important drugs of recent origin where no official specifications exist. During recent years we have examined many such proprietary preparations and I must say that every manufacturer has readily acceded to a request for specifications and the method of assay used in the quality control of his product. A lone investigation that may be of some interest concerns a relatively cheap but nevertheless important group of drugs, namely ferrous iron preparations. Examinations of the three widely used standard tablets ferr. sulph., ferr. sulph. co., and ferrous gluconate, again showed that some companies were consistently good and others consistently bad. Among the latter, when I examined tablet disintegration, I found some so bad that I am convinced that their tablets would have passed through patients unchanged! Obviously the prescribing of the original proprietary ferrous gluconate tablets, which were invariably of excellent quality, would be the only certain way of always ensuring the supply of tablets of good quality. Yet in contrast proprietary preparations of ferrous gluconate with other drugs — in some cases good examples of what I would term the "polypharmaceutical gimmick"—were, in some cases notoriously bad in their failure to disintegrate; the prescribing of such a proprietary preparation would always ensure a product of inferior quality, whereas

the prescribing of the standard drug would give a better than even chance of a quality tablet. It must now be patently clear that the only remedy is an effective system of quality testing.

Before leaving proprietaries I would briefly refer to the increasing vogue for sustained-release preparations. It should be the responsibility of some independent authority to test such preparations. A sustained-release preparation of dexamphetamine containing 15 mgm. of a drug having a maximum dose of 10 mgm. might not present any danger, but can the same be said of a trinitrin preparation containing six times the official maximum dose? With the increasing complexity of pharmaceutical preparations—"quality"—as defined by good disintegration, good formulation and such considerations as particle size, rate of release of prolonged action preparations, etc., is becoming of importance in addition to the chemical determination of actual drug content.

In conclusion, I would say that the Birmingham drug testing scheme was instituted as a direct result of the work done by the Birmingham Laboratory during the early 1950's, which had clearly demonstrated that a much more comprehensive system of quality drug testing was an urgent requisite. This, I believe, we have since unequivocally shown to be true. The Birmingham drug testing scheme also has shown the ineffectual nature of the Ministry's testing scheme which had been established for many years before we commenced operations in the City; judging by the large number of complaints we found from the commencement of our scheme, it had clearly failed to accomplish what we in fact achieved in the relatively short time of three years, namely, a first-class drug supply to the city.

If, as seems possible, a method for the supervision of the clinical testing of drugs by an independent authority is to be instituted I would plead for the inclusion of the supervision of quality testing virtually to eliminate the undesirable results of sub-standard drugs.

If, however, new legislation is contemplated it must surely mean the divorce of drugs from the Food and Drugs Act, abolition of the Ministry's testing scheme as we know it today and vesting the responsibility for the quality control of drugs, whether obtained from retail pharmacists, dispensing doctors or hospital supplies, in a new authority. It would not be unreasonable to insist that any manufacturer supplying drugs must have an efficient quality control within his organisation, which should be open to inspection by the new authority. From experience gained with the Birmingham drug testing scheme I believe a small number of large regional laboratories to be preferable to a central laboratory.

Discussion

MR. G. T. M. DAVID agreed with the speaker that the test of identification in the new Ministry test on proprietaries was an insult to the dispensing chemist and asked if it would be possible to get full quality testing of proprietaries, The Speaker replied that at

present testing was done for the Ministry in their testing scheme by independent private analysts on a simple fee-per-sample basis. The examination of proprietaries was expensive and could not in his opinion be done on that basis. The Ministry's scheme was based on the needs of twenty years ago.

Cost of the Scheme

MR. C. R. DICKENS asked about the cost of the Birmingham Analytical Laboratories to the City ratepayers and for examples of co-operation received from a manufacturer whose products had been found to be sub-standard. Mr. STOCK replied that the total cost of the laboratories was equivalent to \frac{1}{3}d. rate (about £25,000 per annum) but for a population five times the size of Birmingham the cost would only be about doubled. Dealing with the second point he said that one manufacturer had withdrawn the product in question from the area covered by the Birmingham testing scheme. The product in the rest of the country might remain in distribution until used up in the normal way to be replaced by up-to-standard products that had already been introduced in Birmingham perhaps six months earlier.

MR. G. LENNOX (chief pharmacist, Swansea General Hospital) told the speaker that in Wales there was a system of central contract buying of some drugs by the Ministry that meant that the Ministry was responsible for the quality of the drugs. It sometimes happened that the Ministry rejected a drug from one manufacturer and yet another buying group bought it on the production of a private analyst's certificate.

MR. STOCK explained that the only sure way of ensuring that a product was up to standard was by an inherent quality control and not merely by spot testing twenty tablets of the end-product. Obviously the Ministry should require more than an isolated test on a small portion of the end-product.

Asked by MR. J. I. JAMES to comment on the Government's cheap drug policy, MR. STOCK said that in his opinion a cheap drug policy could be dangerous. If the country wanted a first-class Health Service, then it should be prepared to pay for it. The drug bill was static in proportion to the total cost of the Health Service and also in relation to the national income. It had been calculated that the antituberculous drugs saved the country £50 millions a year (approximately half the total drug bill). All in all, the drug bill of £100 millions a year was cheap when it was considered what had been accomplished.

MR. J. S. GILBERT asked if the highest priced drugs were the purest. The answer given was that the cheaper the production costs, the more likely there were to be mistakes, because less attention was paid to quality control. However, it was wrong to generalise. Mistakes were not unknown from manufacturers with high production costs.

MR. C. B. REID asked if regional schemes based on the Birmingham scheme were the answer. MR. STOCK's reply was either central or regional laboratories were needed under the control of some independent authority.

GUIDE TO NEW MEDICAMENTS

Information about proprietary products supplied principally on prescription. Reprints on perforated gummed paper for affixing to index cards are obtainable from the Editor. Notes on the products are given on p. 400.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

ADCORTYL-AQ spray

Manufacturer: E. R. Squibb & Sons, Ltd., Edwards Lane, Speke, Liverpool, 24.

DESCRIPTION: Aerosol spray for topical application, containing 3.3 mgm. of triamcinolone acetonide and 20.8 mgm. of chlorhydroxyquinoline with ethanol, isopropyl myristate and propellants in 50 gm.

INDICATIONS: Inflammatory dermatoses that are, or are likely to bc, secondarily infected with bacteria and/or fungi.

METHOD OF USE: Apply for about 3 seconds, at a distance of 3-6 in., three or four times a day. If used on or near the face the eyes should be protected by covering; avoid inhaling.

How Supplied: In 50-gm. erosol container with green cap.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST 1SSUED: August 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

FEMIPAUSIN tablets

Manufacturer: Hoechst Pharmaceuticals, Ltd., Slough, Bucks. DISTRIBUTOR: Horlicks, Ltd., Slough, Bucks.

DESCRIPTION: Pale green sugar-coated tablets containing 5 mgm. of methyl testosterone, and 0.01 mgm, of ethinylæstradiol.

INDICATIONS: Symptoms of the menopause.

Dosage: Initially, four tablets daily; reduced in each subsequent week by one tablet daily. Once the symptoms are relieved one tablet daily may be given, or treatment discontinued for 2-3 weeks then reintroduced at the original dosage level.

PRECAUTIONS: In isolated cases of virilism, the female sex hormone should be administered alone.

How SUPPLIED: In bottles of thirty and 150.

SUPPLY RESTRICTIONS: P.1, S.4B.

FIRST 1SSUED: August 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

INFLUVAC vaccine

Manufacturer: Philips-Duphar, Amsterdam, Holland. Distributor: Crookes Laboratories, Ltd., 19 Park Royal Road, London, N.W.10.

DESCRIPTION: Influenza vaccine containing virus strains A2/305 (Japan 1957) and B33 (Johannesburg 1958), inactivated and standardised to contain 12,000 hæmaglutination units per mil.

INDICATIONS: For prophylaxis against influenza.

Contraindications: Patients known to be allergic to eggs, poultry or poultry feathers.

Dosage: 1 mil by subcutaneous injection normally provides immunity for up to six months.

How Supplied: In 1-mil ampoule, alone or in box of six, and in multidose vials of 10 and 100 mils.

Notes: Store at 2-4° C.

FIRST ISSUED: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

ISO-BROVON (pressurised) inhalant

Manufacturer: Moore Medicinal Products, Ltd., Waverley House, Waverley Place, Aberdeen.

Description: Aerosol spray containing 0.25 per cent. of isoprenaline hydrochloride and 0.14 per cent. of atropine methonitrate in an inert propellant.

INDICATIONS: Bronchial asthma and emphysema.

METHOD OF USE: One or two inhalations as required.

How Supplied: In pressurised ærosol with adaptor; refills also available.

SUPPLY RESTRICTIONS: P.I. FIRST ISSUED: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

BETNESOL suppositories

Manufacturer: Glaxo Laboratories, Ltd., Greenford, Middlesex.

DESCRIPTION: Suppositories containing 1 mgm. of betamethasone (as disodium phosphate).

INDICATIONS: Hæmorrhagic proctitis; post-radiation proctitis; minor degrees of proctitis as may occur in hæmorrhoids.

Dosage: One inserted at bedtime and another after morning defæcation.

How Supplied: In carton of six, packed in a plastic mould.

SUPPLY RESTRICTIONS: Therapeutic Substances Act.

FIRST ISSUED: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

DERMACAINE cream

Manufacturer: Medo-Chemicals, Ltd., 144 Fortess Road, London, N.W.5.

DESCRIPTION: Water-miscible cream containing 2 per cent. of cinchocaine.

INDICATIONS: For relief of pain and irritation of the skin; for gynæcological conditions; for relief of nasal irritation; as a lubricant to facilitate instrumental examination.

METHOD OF USE: Apply as a thin film to the affected area three or four times a day.

How Supplied: In tubes of 15 and 30 gm.

FIRST ISSUED: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

DIMELOR tablets

Manufacturer: Eli Lilly & Co., Ltd., Basingstoke, Hants.

DESCRIPTION: Yellow scored capsule-shaped tablets (embossed "Lilly" on one side) containing 500 mgm. of acetohexamide.

INDICATIONS: Diabetes mellitus of the stable, non-ketotic, maturity onset type that is not controlled by dietary regulation alone.

Dosage: Usually a single, daily dose before breakfast. Some patients may be better controlled with a close every twelve hours—before breakfast and before the evening meal. The total daily dose may vary from 250 to 2,000 mgm., but the average is 250-1,000 mgm.

How Supplied: In bottles of 100, 500 and 1,000.

SUPPLY RESTRICTIONS: P.I, S.4B. FIRST ISSUED: September 1962.

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TIXYL linetus

Manufacturer: May & Baker, Ltd., Dagenham, Essex.

Description: Pædiatric cough linetus containing 1.5 mgm. of promethazine hydrochloride, 1.5 mgm. of pholodine (as citrate), 10 mgm. of phenylpropanolamine hydrochloride, and 3.8 per cent. of absolute alcohol per teaspoonful (5 mils).

INDICATIONS: Coughs of various types; especially useful for the irritating cough that is often troublesome to children at night.

Dosage: Children (2-5 yrs.) 1 teaspoonful two or three times a day; (5-10 yrs.) 1-2 teaspoonfuls two or three times a day. Usually taken undiluted, but last dose of the day may be given in warm water or fruit juice.

How Supplied: In bottle of 125 mils, with plastic teaspoon to measure 5 mils.

Supply Restrictions: P.I, S.7. First Issued: April 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

CONTAX tablets and suppositories

Manufacturer: Continental Laboratories, Ltd., 85 Church Road, Hove, 3, Sussex.

DESCRIPTION: Plum-coloured enteric-coated tablets containing 5 mgm. of acetphenolisatin. Foil wrapped suppositories containing 10 mgm. Laxative evacuant.

INDICATIONS: Chronic and simple constipation, or where local conditions (anal fissures, etc.), call for a gentle laxative or evacuant; pre-operatively.

Dosage: One or two tablets at night, and one next morning if necessary; alternatively, one suppository inserted one hour before evacuation is required.

How Supplied: Tablets in bottles of fifty, 250 and 1,000; suppositorics in boxes of twelve, sixty and 120.

First Issued: July 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

FERRO-GRADUMET "Filmtabs"

Manufacturer: Abbott Laboratories, Ltd., Queenborough, Kent.

DESCRIPTION: Red film-coated tablets (stamped with maker's trade mark) containing 350 mgm. of exsiccated ferrous sulphate (equivalent to 105 mgm. of elemental iron).

lndications: Iron-deficiency anæmia, particularly in cases normally showing gastric intolerance to oral iron.

Dosage: One daily; may be doubled in severe cases.

How Supplied: In bottles of thirty, 100 and 500.

First Issued: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

GOMAXINE cream

Manufacturer: Gomax, Ltd., Distributor: Riddell Products, Ltd., 10 Dunbridge Street, London, E.2.

DESCRIPTION: White non-greasy cream containing 0.5 per cent. of cetrimide and 0.05 per cent. of chlorocresol.

INDICATIONS: Wounds, insect bites, urinary dermatitis; as a skin cleanser.

METHOD OF USE: For topical application.

How Supplied: In tube of 1½ oz. and 1 lb. jar.

First Issued: March 1961.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

PARSTELIN elixir

Manufacturer: Smith, Kline & French Laboratories, Ltd., Welwyn Garden City, Herts.

DESCRIPTION: Red, strawberry-flavoured syrup containing 10 mgm. of tranyleypromine (as sulphate) and 1 mgm. of trifluoperazine (as dihydrochloride) per teaspoonful (3.5 mils). Anti-depressive.

INDICATIONS: Depression and anxiety; emotional fatigue; menopausal syndrome; psychosomatic illness.

Contraindications: Recent cardiovascular disease, known liver damage or blood dyscrasias.

Dosage: One teaspoonful morning and afternoon.

SIDE-EFFECTS: Insomnia, hypertension with severe headache, orthostatic hypotension.

How Supplied: In bottle of 4 fl. oz. Supply Restrictions: P.I, S.4B. First Issued: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

SERENESIL capsules

MANUFACTURER: Abbott Laboratories, Ltd., Queenborough, Kent. Description: Red capsules containing 500 mgm. of ethchlor-vynol. Hypnotic.

INDICATIONS: Insomnia.

Dosage: One capsule half-hour before retiring; a second capsule may be taken if necessary.

How Supplied: In bottles of 100 and 500.

SUPPLY RESTRICTIONS: P.I, S.4B. FIRST ISSUED: August 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

GOMAXIDE liquid

Manufacturer: Gomax, Ltd. Distributor: Riddell Products, Ltd., 10 Dunbridge Street, London, E.2.

DESCRIPTION: Green liquid containing a mixture of isomers of chloroxylenol (2.5 per cent.), p-chloro-m-xylenol (2.5 per cent.), terpineol (7.5 per cent.) and chlorophyll (0.015 per cent.).

INDICATIONS: For cold sterilisation of non-boilable instruments.

METHOD OF USE: Suitably diluted according to the manner of use.

How Supplied: In 8-oz. bottle, 1 and 5 gallon containers.

First Issued: January 1960.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

SCHERICUR ointment

MANUFACTURER: Schering, A.G., Berlin. DISTRIBUTOR: Pharmethicals (London), Ltd., Victoria Way, Burgess Hill, Sussex.

DESCRIPTION: Ointment containing 0.25 per cent. of hydrocortisone and 2.5 per cent. of a clemizole-hexachlorophane complex.

INDICATIONS: Acute and chronic eczema (of toxic or allergic ætiology). Indicated particularly for long term therapy.

METHOD OF USE: Rub lightly into the affected area, two or three times a day.

How SUPPLIED: In tube of 20 gm.

SUPPLY RESTRICTIONS: P.I, Therapeutic Substances Act.

FIRST ISSUED: September 1962.

THE CHEMIST AND DRUGGIST Guide to New Medicaments, October 6, 1962

TUSSIEX elixir

Manufacturer: Crookes Laboratories, Ltd., 19 Park Royal Road, London, N.W.10.

DESCRIPTION: Dark brown liquid containing 300 mgm. of ammonium chloride, 60 mgm. of sodium citrate, 15 mgm. of ephedrine hydrochloride, 8 mgm. of pholoodine, and 2 mgm. of menthol per 8-mil dose.

INDICATIONS: For maintenance of respiratory function in the bronchitic, especially during the winter months.

Dosage: Adults, two teaspoonfuls morning and evening or as directed by the physician.

How SUPPLIED: In bottles of 8 and 80 fl. oz.

SUPPLY RESTRICTIONS: P.I. FIRST ISSUED: September 1962.

AMENDMENTS

DAPTAZOLE TABLETS. Now contain 100 mgm. of amiphenazole. The 20-mgm. tablets have been discontinued.

FLUGEN VACCINE. Now contains equal quantities of activated virus A2/Asian and B/England/939/59, having a potency of 16,000 hæmagglutinating units per mil.

INVIRIN VACCINE. Now contains the three viral strains: A/Singapore/1/56, A/England/1/61 and B/England/939/59. Available in 1-mil ampoules and 10-mil multidose vial.

MEDIHALER products. Now issued in vials of 15 mils, providing 300 doses.

Panadol Elixir. Also available in bottle of 60 mils.

PARABAL TABLETS. Now purple.

PRISTACIN CHEWING GUM. No longer contains sodium propionate.

ROBINUL and ROBINUL-PH TABLETS. Note re-spelling of name. STEROGYL-15. Now supplied in 3-ampoule pack.

DISCONTINUED

Dextelan tablets (Glaxo Laboratories, Ltd.). Metycaine injection (Eli Lilly & Co., Ltd.). Monotheamin injection (Eli Lilly & Co., Ltd.). Prednesol tablets (Glaxo Laboratories, Ltd.). Presidal tablets (Burroughs Wellcome & Co.).

NINETY-NINTH MEETING OF THE BRITISH PHARMACEUTICAL CONFERENCE, LIVERPOOL, 1962

Science Sessions

(Concluded from The Chemist and Druggist, September 15, p. 309).

SIX papers were presented and discussed at the Donnan Laboratories during the Science session on the last morning of the British Pharmaceutical Conference at Liverpool, September 10–14. The first, a short communication, was read by Mr. C. B. Macfarlane.

Surface Activity of Non-ionic Detergents

P. H. ELWORTHY and C. B. MACFARLANE In contrast to ionic detergents, the nonionic type provides an opportunity to alter the hydrophilic portion of the molecule by varying the number of ethylene oxide units in the polyoxyethylene chain. A series of compounds based on hexadecyl alcohol has been synthesised of general formula CH₃ (CH₂)₁₅(OCH₂CH₂)_nOH where n varied from six to twenty-one. A study of their micellar shape and hydration has been made. The critical micelle concentrations (CMC) increased with lengthening of the polyoxyethylene chain-a result of the increase in the hydrophilic properties of the molecule. It appears that the polyoxyethylene chain determines the area/molecule. Several workers have shown that the polyoxyethylene chain is considerably curled up in solution and it seems likely that the chain is probably orientated in a position roughly parallel to the surface. The area/ethylene oxide unit decreases as the chain length increases. One end of the chain will be anchored to the surface by the hydrocarbon portion of the molecule, but the end remote from this point may be less strongly adsorbed at the surface, and may tend slightly away from it.

(From the School of Pharmacy, Royal College of Science and Technology,

Glasgow) DR. MULLEY, London, reported that, because of the different methods adopted in determining surface tension curves, some workers obtained higher values of critical micel concentrations than others. He asked if the surface tension curves had been obtained on aged solutions in every case? P. H. ELWORTHY replied that the prime trouble in the work was the tendency to "lose" molecules on the glassware. It was necessary in surface-tension measurements to ensure that the equilibrium state obtained.

MULLEY suggested that the Dr. reason for different results obtained by workers might be differences in the purity of the various samples. MACFARLANE replied that the distilla-tion conditions were severe, and chromatography had been resorted to.

MR. C. G. BUTLER read the following short communication:

Electro-reduction of Crystal Violet and Brilliant Green

C. G. BUTLER and MRS. F. P. MARTIN THE application has been studied of controlled potential coulometry to the electro-reduction of the triphenylmethane

dyestuffs crystal violet and brilliant green. Previous polarographic work indicated that, like aminoacridines, these were reduced in two stages, each involving the uptake of one electron. In the present study, direct measurement of the quantities of electricity involved in the reduction of a known amount of dyestuff at the stirred mercury cathode has confirmed those findings. That may be of significance in view of Kaye's (1950) theory that bacteriostasis by certain dyes is related to free radical formation.

(From the Department of Pharmacy,

Bradford Institute of Technology)
DR. G. E. FOSTER, Dartford, asked if Mr. Butler could expand on the reference to Kaye's theory, to show how his work might be of value in the practical pharmaceutical field. Mr. Butler replied that Kaye had put forward his theory in a paper during the 1950 Conference meeting. He had been unable to measure directly the number of electrons involved during reduction of the dyestuffs. There were uncertainties in polarographic procedures. The present work had confirmed Kaye's supposition. Mr. P. H. ELWORTHY asked if the values obtained had been checked by diffusion coefficient measurements, and the author said he had not attempted that. In coulometric studies the n value could be determined directly.

The next paper was presented by Mr. N. A. STEVENSON, who was presenting a paper before the Conference for the first time.

Studies on Datura Ledtrhihacii

PART II. ALKALOIDAL CONSTITUENTS

W. C. EVANS and N. A. STEVENSON THE variation in the proportion of hyoscyamine and hyoscine in the aerial parts of Datura leichhardtii has been investigated. The composition of the alkaloids is similar to that in D. stramonium. In the flowering and young fruiting plants, hyoscyamine and hyoscine occur in the ratio of about 2:1, whereas in most datura species examined to date, hyoscine is the main alkaloid of the aerial parts. In old plants the ratio of hyoscyamine to hyoscine may rise to 9:1. That increase during development is similar to that observed in \hat{D} . stramonium and also agrees with the conclusions reached for D. stramonium on the basis of isotopic feeding experiments. From the roots, the alkaloids 7 - hydroxy - 3,6 - ditigloyloxytropane, 3a-tigloyloxytropane and meteloidine have been isolated. Further experiments are planned to extend the observations on root alkaloids to all ages of the plant and over a range of environmental conditions.

(From the University, Nottingham)
DR. J. M. Rowson, Bradi Bradford. Dr. J. M. Rowson, noticed divergence in alkaloidal content in the various samples, and asked if the plants were likely to have commercial value. Had the authors given any consideration to the migration of the alkaloid within the plant? Mr. STEVENSON replied that the low alkaloidal content of the eight-week sample had caused surprise. It was doubted if the plant would be of commercial value, except possibly for hybrid formation. It would appear that the hyoscyamine produced in the roots was translocated to the leaves and converted. Dr. F. Fish, Glasgow, asked if any biosynthetic relationship of the esters in stems and leaves had been ascertained and Mr. STEVENSON replied that work was being done to ascertain any such relationships.

Mr. O'CONNOR, Dublin, asked if the authors had tried the Vitali-morin reaction. He was informed by the author that the test had been carried out, the result showing 0.04 per cent. tropoyl esters.

Dr. E. J. SHELLARD, Hounslow, suggested that the authors might use film chromatography as well as, or instead of, paper chromatography. The method was more sensitive.

Dr. W. MITCHELL, London, asked if the authors had done a mixed meltingpoint determination to satisfy them-selves that the melting points of both 3α-tigloyloxytropane and meteloidine picrates were 178–79° C. He had found the first to be 200° C. Dr. W. C. Evans, co-author of the paper, replied that he had never obtained that high figure. The two substances' R_F values were quite distinct, however. Their crystal shapes were also different: the first gave serrated crystals and the meteloidine was in regular nodules.

Mr. S. G. E. STEVENS, Welwyn Garden City, suggested that the authors should co-operate with Mr. C. A. Johnson, co-author of a previous paper (No. 11), on the possibility of using tetraphenylboron instead of picrate. Dr. Evans considered that substance useful, but wondered if it was so easy to analyse. Mr. Johnson added his method might not be much improvement on the picrate. Replying to Dr. F. FISH, Glasgow, Mr. STEVENSON said he was trying to obtain crosses with other datura species.

The twentieth paper was read by MR. M. I. BARNETT, who was appearing as a co-author for the first time.

Particle Size Distribution of Marble on Wet Ball Milling

EFFECT OF THE SOLID: LIQUID RATIO

M. I. BARNETT and K. C. JAMES An investigation has been made of a wet ball milling procedure that depends on the apparent viscosity of the charge on the apparent viscosity of the charge increasing during the operation until the balls are held by the charge, and circulate with the mill. By varying the solid: liquid ratio of the charge the mean particle size of the product was changed and shown to be a linear funcchanged, and shown to be a linear function of the proportion of solid in the charge. Both the volume and the mass of the balls were altered by changing their size; and those factors affected the final particle size in opposite ways. With smaller balls there are more

points of contact, and the milling is more efficient; but the heavier the balls, the longer will they resist retention by the charge, and once again a finer product will result.

(From the Welsh School of Pharmacy, Welsh College of Advanced Technology, Cardiff)

MR. M. J. GROVES asked if a Timbrell double-image micrometer and particle-size analyser could be used in the measurements of 1 micron. Mr. Bar-NETT confirmed that it could. Dr. J. E. CARLESS, Chelsea, asked why marble had been chosen. Was the material homogeneous and had any rheological investigations been carried out? MR. BARNETT replied that marble had been chosen because it was cheap and because it was insoluble. It looked homogeneous. No work had been done on the viscosity of the final suspensions.

Replying to Mr. K. A. LEES, Greenford, Mr. BARNETT said the balls had occupied half of the pot's capacity; sufficient charge had been added to fill the spaces between the balls, and to just cover them. When filling began, all the balls were in motion. After 15-18 hours, some balls on the periphery started to stick; but the end-point was quite sharp, 75 per cent. of the balls remaining in motion until that point. Observer errors were "very low." The author said he would be pleased to learn of other materials with which to work.

DR. H. D. C. RAPSON, Letchworth, suggested that the viscosity of the suspension was an important factor, and that varying the concentration of the surface-active agent must affect the particle size. Was there any evidence to support the contention? Mr. BARNETT said he had no information on that

aspect.

DR. R. F. WHITE, Welwyn Garden City, said it might be difficult to relate particle size to concentration of the dispersing agent and Dr. D. TRAIN reminded the authors that, as the particles became smaller, they became more perfect and "tougher nuts to crack." They could thus influence the They could thus influence the results.

Mr. C. G. BUTLER said that surfaceactive agents were not always efficient in causing defloculation of a system. Certain chelating agents, however, were effective. Mr. BARNETT replied that they had not tried other defloculating agents. Dispersil T appeared to effect com-



FROM UNIVERSITY COLLEGE HOSPITAL: Dr. T. D. Whittet (chief pharmacist) with Mr. L. D. De Fonseka (an apothecary from Ceylon working at U.C.H. under the British Council).

plete defloculation. Mr. K. C. JAMES, as co-author, said he would be grateful if anybody could suggest other materials to use in future experiments. number of members called out Phosphor bronze."

The short communication that followed was read by Mr. P. F. G. Boon, who was making his second appearance

before a B.P. Conference.

Determination of Trichloroethyl Phosphate in Pharmaceutical **Preparations**

P. F. G. BOON

INTRODUCTION of the monophosphoric ester of trichloroethanol as a hypnotic made it necessary to develop analytical methods for determining the ester in the presence of its decomposition products. Published methods for determining trichloroethanol and closely related compounds were examined but none was found suitable for the esterified alcohol. Enzymatic hydrolysis of the phosphate link (Boon, 1960) worked satisfactorily and the liberated trichloroethanol was isolated by steam distillation, then estimated by the method of Marshall and Owens (1954). However, that procedure proved rather cumbersome for routine use. Halogenated compounds have been determined previously by alkaline hydrolysis followed by titration of the chloride ion thus produced. Application of that method was facilitated by the observation that trichloroethyl phosphate could be extracted by pentanol from acidified aqueous solutions. The combined chlorine proved somewhat resistant to hydrolysis, and required treatment with 2N alcoholic potassium hydroxide for two hours at 120° C. When applied to substrates of 0·1 and 0·2 mgm. of monosodium trichloroethyl phosphate, recoveries of trichloroethanol of 98.5 and 95.3 per cent. respectively, resulted. (From the analytical department, Glaxo Laboratories, Ltd., Greenford, Middle-

Mr. Boon told Mr. C. A. Johnson that there was no risk of hydrolysis by brief contact with cold alkali; if the pH was under 7, however, there was risk of extraction by the ether.

Dr. Garratt took the chair for paper No. 22, which was read by Dr. J.

Effect of a Sulphated Polysaccharide on Histamine-stimulated Gastric Secretion

W. ANDERSON, R. MARCUS and J. WATT DEGRADED carrageenin administered in aqueous solution via an œsophageal tube to guinea-pigs twice daily for eight to fourteen days and also available as drinking fluid, caused a 50 per cent. reduction in the volume and acidity of histamine-stimulated gastric juice. That could be an important factor in the protection afforded by carrageenan against histamine-induced duodenal ulceration.

(From Evans Medical Research Laboratories, Clatterbridge Hospital, and the department of pathology, University of Liver pool)

DR. G. E. FOSTER, Dartford, having requested chemical details of the preparation, D. W. ANDERSON (co-author) said the material was a total aqueous extract from carrageenin. It formed a complex with muco-protein. Dr. H. D. C. RAPSON, Letchworth, asked if the preparation interfered with the assimilation of other substances and DR. WATT replied that he did know how the compound worked. Mr. R. L. STEPHENS, Havant, suggested that aspirin might be a suitable substance for assimilation tests. Dr. WATT rcplied that carrageenin did not prevent aspirin erosion in the guinea pig. Dr. ANDERSON said that the preparation did not interfere with the absorption of glucose by rats. The toxicity of certain cationic macro molecules was reduced by the preparation.

FINAL SCIENCE SESSION

RATHER over 100 attended the final science session on Friday afternoon, when, under Mr. J. C. Hanbury (Conference chairman), three papers were presented, Mr. R. Goodey, co-author of a paper on the assay of streptomycin (a short communication) was appearing for the first time.

Polarographic Assay of Streptomycin

R. GOODEY, T. E. COULING and MISS J. E. HART

A POLAROGRAPHIC method has been developed for the assay of streptomycin fermenter broth and associated recovery stages. The work was carried out using a Tinsley Mark 19 pen recording polarograph, with mercury capillaries of drop times between two and three sec. at a 50 cm. height. 0.05N lithium hydroxide was used as base electrolyte. Use of a derivative circuit reduced overall sensitivity but improved resolution, so that it became possible to measure polarograms from solutions as dilute as 10 units/mil. The streptomycin response was rectilinear and proportional up to at least 300 units/mil. The polarograph method compares favourably with other assays. Of those, the maltol method in particular is subject to interference from streptomycin-like compounds that respond as streptomy-Such impurities are apparently polarographically reduced at a different half-wave potential, and are thus excluded from the result. The sensitivity of the polarographic assay is similar to that of the microbiological method. (From The Distillers Company (Biochemicals), Ltd., Bromborough, Ches)
DR. G. E. FOSTER, Dartford, wanted

to know if it was necessary to run standards at the same time as the assays, or did the authors prefer to make a cali-bration curve? MR. GOODEY said that, normally, samples were taken in a series; between those were interspersed standards. Comparative results from polarographic and microbiolog methods agreed to within 5 per cent polarographic microbiological

Dr. A. TALLENTIRE then read the following (short) communication:

Postirradiation Oxygen Effect in **Bacterial Spores**

A. TALLENTIRE and N. A. DICKINSON RECENT work involving exposure of dried bacterial spores to ionising radiations shows that the presence of oxy-

gen after irradiation increases lethal damage caused by energy absorption. It is of particular interest in the application of radiation sterilisation that the lethal efficiency of a dose of radiation can depend on the storage conditions of the irradiated material. Preliminary experiments were carried out to elucidate the mechanisms of those post-irradiation effects. From the preliminary results, and accepting the views of Powers, Webb and Kaleta (1960) on the scavenging rôle of nitric oxide, it is inferred that the post-irradiation oxygen effect in spores results from an association of free radicals with oxygen. In addition, potentially harmful radicals can be removed even after exposure to oxygen and after partial development of the oxygen effect. Since those radicals are also harmless on reduction of the oxygen pressure, it is suggested that gaseous oxygen maintains the existence of an unstable oxygen-radical complex which itself is responsible for the post-irradiation oxygen-dependent lethal effect. (From the Department of Pharmacy,

University of Manchester) Replying to MR. HANBURY, DR. TAL-LANTIRE said that responses from cobalt-60 and x irradiation were qualitatively, and probably quantitatively, the same. The cobalt-60 source was to be preferred from an experimental point of

view.

DR. RAPSON, Letchworth, said it was his impression that there were basically two mechanisms likely; one involved damage to the molecular constituents, and the other involved water. He understood that, with the latter process, the oxygen effect was most pronounced. He wondered which mechanism was opera-

tive in the present study.

Dr. TALLENTIRE said that the action was associated with a large molecule within the organism. Recent data intimated that possibly there were not two mechanisms but a direct action. He told another questioner that, after irradiation, those spores that survived often germinated, but not all passed through sufficient divisions. In a further exchange with Dr. RAPSON, he said that recovery might not be due to excess enzymes but to a system of self-repair. He did not think the radiation time influenced survival — unless it were "chronic," for example twelve months.

The last paper, another short communication, was read by MR. V. WALTERS, Nigeria, the only co-author

from overseas.

Effect of Age on the Viability of Penicillium notatum Spores

N. M. CHAUHAN and V. WALTERS A VARIATION in resistance to phenol of Penicillium notatum spores of different ages is reported. The viability of the spores in water and after exposure for ten and twenty minutes to 1 per cent. solution of phenol and for ten minutes to 1.125 per cent, solution was determined at 25° C. Maximum resistance to both solutions of phenol is found in spores from five- to ten-day cultures. When stored in water at 4° C. the resistance to phenol of an aqueous suspension of a ten-day-old culture remained unaffected for seven days. Moreover, the subsequent decrease in

resistance to phenol is less marked than when the spores were allowed to age in culture. Maximum resistance to phenol is possessed by spores from five- to ten-day cultures, which are presumably mature. When older than ten days their resistance to phenol decreases with increasing age. For the evaluation of fungicides, spores possessing maximum resistance to the test fungicide should be used. With phenol and P. notatum and the experimental conditions described, spores from five- to ten-day-old cultures which may be stored in water at 4° C. for up to seven days, are suit-

(From the department of pharmacy, University of Ife, Ibadan Branch, Ibaban, Nigeria)

THE CHAIRMAN wondered if, with phenol solutions, it was a question of "survival of the fittest." The author said some indication could be given by plotting a graph of survival against the period of incubation, with spores of

different ages. For example, using 1 per cent, phenol for ten minutes, three-day old spores showed a 20 per cent. via-bility; five-year old a 55 per cent., and eight to ten-year olds about the same; with older spores, there was a falling off to 10-20 per cent. He informed MR. G. H. WRIGHT, Leeds, that Professor Berry and Dr. I. Michaels had, in 1950, found that there was a change in viability of E. coli against ethylene glycol ethers with ageing of the spores.

Mr. Hanbury asked if the culture used in the present study was natural or "laboratory attenuated." Mr. Wal-TERS said he had not tested spores from the immediate environment; those used were from the Microbiological Institute. Kew, Surrey. The experiment had been influenced by temperature and by the recovery medium. There was optimum recovery at 26–28° C. He told a further questioner that he did not think it possible to distinguish between bactericidal and bacteriostatic effects on an age basis.

INTERNATIONAL FOOD LAWS

Analyst suggests a world code to end present chaos

THE problems associated with additives, etc., in food in relation to the varying regulations governing their sales in international trade were the subject of a symposium session in London on September 24. It was arranged by the food group of the Society of Chemical Industry.

A Vast Problem

MR. T. McLachlan (public analyst, London), who read the first paper, which was aptly entitled "The Present Chaotic Position," said there was no international agreement regarding descriptions given to foods, their hygienic requirements, the various additives that may be present, or the controlling of labelling. Although W.H.O. and F.A.O. were endeavouring to circulate information regarding existing and fresh legislation, the problem was vast.

The descriptions given to ingredients and illustrations permitted on labels was confusing. For instance water was an ingredient in a food in the United States, but not in Great Britain, where a drink need contain only 2.5 per cent. of fruit juice and yet be labelled to the effect that it had been made from the named juice. The detailed information required on food labels was a recent innovation and was so complex that some fifteen different labels may be required for a product to be sold in the United States and a further five for distribution in Australia. There was a general feeling among non-English-speak-ing peoples that one label in English should suffice for all English-speaking countries.

As for colouring agents the position had been reached when only one synthetic colour was accepted universally. All others had been condemned by one country or another, although each still retained a list of about thirty permitted colours. Some guidance was urgently required about the real or imaginary risk of cancer from various food additives, and about the method of testing. For example should the substances to be tested be fed to animals or injected?

Certain antibiotics, pesticides and fertilisers were known or believed to cause allergic reactions, but more information was required on that point, and also about possible effects resulting from the use of antibiotics in the treatment of animals, including human beings, due to the acclimatisation of bacteria. One aspect of food additives that had not received sufficient attention so far was that of pesticide rotation. A three-year rotation for insecticides had been introduced in certain breeding establishments, and it was essential that some thought should be given to the possibility of such rotation, not only on individual farms, but on a world-wide basis.

If international trade in food was to be free and unhampered it was essential that a large central organisation should be quickly built up by bodies of the United Nations, for the co-ordination of information concerning every aspect of food production and marketing obtained by research carried out in different countries. A world code should be produced from work carried out in universities, national research institutes, industrial organisations, scientific socie-

ties, or any other bodies.

MR. J. F. MAHONEY (manager food and feed development, chemical division, Merck & Co., Inc., U.S.A.), who gave the second paper, also emphasised that differences among nations in food additive regulations affected trade. In some cases the problem was so severe that importation of food into a country was prevented entirely because it contained prohibited additives. In other cases, alternate and perhaps less efficient additives had to be used to meet the special requirements of the importing country, leading to higher cost, reduced availability, and even poorer quality of food.

N.H.S. STATISTICS

In Northern Ireland during June 537,191 prescriptions (383,596 forms) were dispensed at a total cost of £278,678 (£223,747 net). Average cost was 123.87d. (99.96d. net).

BIG advertising launch for the new trend in Baby Feeding



* wide necked feeding bottles and transparent latex teats * WITH BIG, ATTRACTIVE PROFIT MARGINS FOR YOU!

The FREFLO campaign is the spearhead of Lewis Woolf's new marketing policy. Trade in the U.S.A. has gone over almost completely to the new improved FREFLO shape —easier to fit, easier to clean. And now from 30th September your sales will be supported by dominating advertisements in:

Daily Mirror · Daily Record **Sunday Pictorial Mother** • **Mother and Baby** Woman · You And Your Baby **Mothers Safety Code**

THIS IS THE BIGGEST ADVERTISING CAMPAIGN YET FOR THIS TYPE OF PRODUCT - NOW YOU SHOULD BE READY WITH YOUR STOCKS OF FREFLO





for narrow necked teats and bottles the name is



144 OAKFIELD ROAD, SELLY OAK, BIRMINGHAM 29

World's largest manufacturers of transparent latex teats, leaders in over 80 countries.



TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, OCTOBER 2: Quiet trading conditions were again maintained during the week in all sections of the market. Apart from a few commodities

prices were held at previous levels.

Brazilian MENTHOL was easier for shipment by 2s. per 1b. at 25s, 6d., c.i.f.; Formosan material eased sixpence per lb. for shipment. Among Aromatic Seeds, Moroccan Coriander was one shilling per cwt. lower but CUMIN rose by 10s, per cwt, on the spot. Black Malabar Pepper lost some of the firmness displayed in the previous week and finished 5s, per cwt. down, There was no change in the supply position or price of IPECACUANHA. New crop CHAMOMILE was reported short and very dear with offers from Belgium varying between 10s. and 14s. per lb. Prices of the new crop Poppy HEADS are expected to be slightly up on last year; the first supplies are reported to be about ready for shipment.

Among Essential Oils Formosan CITRONELLA was sixpence per lb. lower in bond. LEMON was inclined to be firmer but LEMONGRASS was unchanged.

CARMINE again advanced 10s. per lb. making it 106s, following the recent advance of Cochineal. Acetone was reduced by £5 per ton to £74 per ton on October 1. METHYL ETHYL KETONE at £121 10s. per ton was down £10.

Pharmaceutical Chemicals

AMIDOPYRIN. — Per lb. 16s. 8d. for 5cwt. lots; 1-cwt., 17s. 5d.

AMYLOBARBITONE. — B.P.C. is 78s. per kilo for less than 25-kilo lots and Sodium, B.P.C., 88s. per kilo.

BARBITONE. — Less than 25-kilo, lots 53s. 6d. per kilo. Sodium derivative 51s. 9d. per kilo.

BISMUTH SALTS. — Prices (per lb.) in packages over 2-lb.:—

	28 lb. 1 cwt		ewt.	5 cwt.
CARBONATE	 s. d	s. 20	d. 0	s. d. 19 6
SALICYLATE	 20	3 19	9	
SUBGALLATE	 19 9) 19	3	
SUBNITRATE	 18 €	5 18	0	17 - 6

BISMUTH AMMONIUM CITRATE is 55s. per lb. and — SODIUM TARTRATE, 35s.; OXIDE, 26s. 10d.; OXYCHLORIDE, 27s. 3d.; in cartons of 28-1b.

BUTOBARBITONE. — B.P.C., kilo in less than 25-kilo lots. - B.P.C., 87s. 6d. per

LONDON EXCHANGE RATES

At the opening on Monday

	F	
Amsterdam	Florins to £	$10.07\frac{1}{2} - 10.07\frac{3}{4}$
Bombay	Shillings to	1/615-1/61
	гирее	$1/5\frac{15}{16}$ $-1/6\frac{1}{16}$
Brussels	Francs to £	139.30-139.35
Copenhagen.	Kronor to £	$19.38\frac{1}{2} - 19.38\frac{3}{4}$
Frankfurt	D Marks to £	$11.20\frac{1}{2} - 11.20\frac{3}{4}$
Hong Kong .	Shillings to \$	$1/2\frac{29}{32} - 1/3\frac{1}{32}$
Karachi	Shillings to	
	rupee	1/5 15-1/6 18
Lisbon	Escudos to f	80.15-80.25
Malaya	Shillings to \$	$2/3\frac{3}{2}-2/4\frac{1}{32}$
Milan	Lira to £	1,7377-1,7383
Montreal	Dollars to £	$3.01\frac{1}{2}$ $-3.01\frac{5}{8}$
*New York	Dollars to £	20.02 - 20.03
Osfo	Kronor to £	2.78-28.2
Paris	Francs to £	13.721-13.721
Stockholm	Kronor to £	14.42 1-14.42 1
Zurich	Francs to £	$12 \cdot 11\frac{7}{8} - 12 \cdot 12\frac{7}{8}$
Bank of Eng	land official lim	its. Bank rate:

44 per cent, from April 26.

Cocaine. — 16-oz. lots hydrochloride, 91s. 6d. per oz.; ALKALOID, 101s. per oz. Subject to D.D.A. Regulations.

CYCLOBARBITONE. — Less than 25 kilos, B.P.C., 73s. per kilo. Calcium, 85s. per

GLYCERIN.—Chemically pure B.P.:—

	Ove 25 to		5 to and und 25 to	d ler	1 to an und 5 to	d er	Und 1 to	
TANK WAGONS	s.	\overline{d} .	s.	d.	5.	d.	s. d.	
10-14 tons	176	0	-	-	_			
5-10 tons	177	6	179	6			_	
DRUMS								
10 cwt.	180	0	182	0	185	0	191	0
5 cwt.	180	0	182	0	185	0	191	0
2½ cwt.	182	6	184	6	187	6	193	6
1 cwt.	184	0	186	0	189	0	195	0
TINS								
56 lb.	199	6	201	6	206	6	215	0
28 lb.	205	0	207	0	212	0	220	6
14 lb.	211	6	213	0	218	0	226	6

Delivery of less than 1 cwt. charged 7s. 6d. extra. Drums charged and returnable. Minimum terms for technical grade glycerin s.g. 1.2627 are 171s. 0d. per cwt. for lots of over 25 tons in bulk deliveries of 10–14 tons.

HEXOBARBITONE. — 25-kilo lots or over, 115s. per kilo.

HYDROCHLORIC ACID.—B.P., 50s. per cwt.

HYDROCYANIC ACID.—Dilute B.P.C., from 3s. 2d. to 4s. per litre, as to quantity; Scheeles from 3s. 10d. to 4s. 9d.

LEAD ACETATE.—B.P. crystals, 225s. per

METHYL PHENOBARBITONE.—B.P.C., 80s. per kilo for less than 25-kilo lots.

NARCOTINE.—ALKALOID and HYDROCHLOR-IDE, 3s. 9d. per oz. (132s. kilo) for under 35-oz. lots.

OPIATES.—Home trade prices (per oz.) subject to D.D.A. Regulations:—

		35 oz ov		Un 35	der oz.
C	_	s.	d.	s.	d.
CODEINE					_
ALKALOID	• •	54	0	55	0
HYDROCHLORIDE	• •	47	3	48	3
PHOSPHATE		41	0	42	0
SULPHATE		47	3	48	3
MORPHINE				i	
ACETATE		50	0	51	0
ALKALOID		61	3	62	3
HYDROCHLORIDE		50	0 -	51	0
SULPHATE		50	0	51	0
TARTRATE		60	0	61	Ō
ETHYLMORPHINE			-		
ALKALOID		63	3	64	3
HYDROCHLORIDE		54	Õ	55	0
DIAMORPHINE		34		55	,
ALKALOID		59	9	60	9
		54	9	55	9
HYDROCHLORIDE	1	34	7	33	9

PENTOBARBITONE. — Under 25-kilo lots, 115s. per kilo.

PETHIDINE HYDROCHLORIDE. — Subject to D.D.A. Regulations, 5-kilo lots, 330s. per kilo; 2½ kilos, 350s.; 500 gm., 425s. per kilo.

Phenobarbitone. — Spot rate 50-kilo lots, 47s. 6d. per kilo; 5-kilos, 50s. 6d; 500-gm., 54s. 6d. Sodium salt, 55s. 6d. per kilo for 5-kilo lots.

PHOSPHORIC ACIDS. — B.P. (s.g. 1.750) is from 1s. 4d. to 1s. 8d. per lb. as to quantity. B.P. 1914, 1s. 2d. to 1s. 6d. per lb. Hypophosphorous, B.P.C., in winchesters is from 7s. 5d. to 8s. 6d. per lb. as to quantity; drums, 7s. per lb.; 50 per cent. acid in drums, 8s. 9d. per lb.

PHTHALYL SULPHATHIAZOLE. — Five-kilo lots, 35s. per kilo.

PILOCARPINE.—In 1-kilo lots prices are: HYDROCHLORIDE, 1,375s. per kilo; NITRATE,

QUINALBARBITONE.—Sodium salt is 120s. per kilo for under 25-kilos.

Succinyl sulphathiazole. — Five-kilo lots, 42s. 6d. per kilo.

SULPHACETAMIDE. — SODIUM derivative, about 40s. per kilo in 100-kilo lots.

SULPHADIAZINE.—Five-kilo lots, 65s. per kilo; 50-kilos, 60s.

SULPHADIMIDINE.—50-kilo lots are 55s. per kilo.

SULPHAGUANIDINE.—100-kilo lots, about 19s. 6d. per kilo.

SULPHAMETHIZOLE. — Per kilo.—5-kilo lots, 130s.; 50-kilo, 125s.

SULPHANILAMIDE. — One-cwt. lots, 6s. per 1b.

SULPHAPYRIDINE. — Five-kilo lots, 120s. per kilo.

Sulphathiazole. — 100-kilos, 32s. per kilo; 50 kilos, 33s.

Alcohol

BRITISH spirit (fermentation grades) per proof gall.:-

ABSOLUTE ALCOHOL, 95.5 per cent., 74.5 o.p., from 3s. 11d. to 4s. 1d. for same quantities; the special high strength (99.9 per cent., 75.2 o.p.), from 4s, 3d. to 4s. 8d. (in drums) for 1,000-40 galls. (bulk). DOUBLY RECTIFIED ALCOHOL (S.V.R.) 95.8 per cent., 68 o.p., from 3s. 9d. to 3s. 11d. R. R. ABSOLUTE ALCOHOL (re-rectified), 99.7 per cent. 75 o.p., 8s. per proof gall, net per cent., 75 o.p., 8s, per proof gall, net (for 40-gall, drums). Duty is £11 13s. 7d. per proof gall.

ETHYL ALCOHOL: (95 per cent. Gay Lussac, 66 o.p.): where the minimum delivery is 2,500 bulk gall. or over, 3s, 7d.; 1,500, 3s. 8d.; 500, 3s. 9d. Prices are exclusive of duty and are for tank wagon

Synthetic grades (supplied only to buyers authorised by Customs and Excise to buy duty free) the 95 per cent. is from 2s. 10d. to 3s. 0d. and Absolute (99.5 per cent.), 3s. 1d. to 3s. 3d. bulk deliveries.

Methylated Spirit

Methylators' rates per bulk gall, in Great Britain are as follows:

INDUSTRIAL METHYLATED SPIRIT: Strength INDUSTRIAL METHYLATED SPIRIT; Strength 61 o.p., 500 gall. and over, 5s. 1d.; 100 gall. and under 500 gall., 5s. 6d.; 40 gall. and under 100 gall., 5s. 11½d.; 10 gall. and under 40 gall., 6s. 5½d.; 5 gall. and under 10 gall., 6s. 1½d. Strength 64 o.p., halfpenny per gall.; 66 o.p. (B.P.), one penny; 68 o.p., 3½d. more than the above rates with 74 o.p. at 5s. 10½d.; 6s. 3½d.; 6s. 9d.; 7s. 3d. and 7s. 9d. for similar quantities. Tank wagon delivery is 2d. per gall. off list price—minimum, 500 gall. For industrial methylated spirit of perfumery quality prices are from 6s. 6d. (tank wagon) for 500 gall. to 8s. 0½d. (10 gall. drums) for 64 o.p. drums) for 64 o.p.

Strength 64 o.p., in one delivery, 500 gall. upwards, 5s. 5½d. in drums; 100 gall. and under 500 gall., 5s. 10½d.; 40 gall. and under 100 gall., 6s. 4d.; 10 gall. and under 40 gall., 6s. 10d.; 5 gall. and under 10 gall., 7s. 4d. MINERALISED METHYLATED

PYRIDINISED INDUSTRIAL METHYLATED SPIRIT: Strength 66 o.p., 500 gall. and over, tank wagon delivery, 5s. 3½d.; 500 gall. in 40-gall. drums, 5s. 5½d.; 100 gall. and under 500 gall (in drums), 5s. 10½d.; 40 gall. and under 100 gall., 6s. 4d.; 10 gall. and under 40 gall., 6s. 10d.; 5 gall. and under 10 gall., 7s. 4d.

Crude Drugs

 Spot: Spanish napellus, ACONITE. 2s. 9d. per lb.

ALOES. — Cape primes, spot, 170s. per cwt.; shipment, 162s. 6d. to 165s., c.i.f. Curação, spot, 385s.; shipment, 360s., c.i.f.

ANISE. — Chinese STAR 180s. per cwt.. spot, duty paid; shipment, 153s. 6d. to 160s., c.i.f., as to quality.

BALSAMS. — Per lb.: Canada: Spot, 19s. 6d, to 25s. Copaiba: B.P.C. grade, 11s. on spot. Peru: Spot, 8s. 6d. duty paid. Tolu: B.P., from 10s. 6d. to 17s. 6d.

Benzoin.—Sumatra block, spot £18 10s. to £25 per cwt. as to quality.

Calamus.—Root, 100s. per cwt., spot, 87s. 6d., c.i.f.

CARDAMOMS.—Aleppy greens, 8s. per lb., spot; shipment, 7s. 1½d., c.i.f.

CASSIA. — Fistula, 105s. per cwt.; lignea (whole), for prompt shipment, 250s., c.i.f. Spot, 375s., duty paid; broken, 350s.

CHAMOMILE. — Roman-type, 7s, per lb.; Belgian new crop offers vary between 10s. and 14s. per lb. for forward delivery. Matricaria, 7s. 6d. on the spot.

CHERRY BARK. — Thin natural, 1s. 7d. per lb.; shipment, 1s. $5\frac{3}{4}$ d., c.i.f.

Chillies. — Nigerian, 180s. Mombasa, 240s.; Zanzibar, 170s. per cwt.

CINNAMON QUILLS.—Shipment (c.i.f., per lb.) 4 O's, 6s. $0\frac{1}{4}$ d.; single O, 5s. $6\frac{1}{4}$ d.; seconds, 5s. $2\frac{1}{4}$ d.; quillings, 4s. $10\frac{3}{4}$.; featherings, not quoted.

CLOVES.—Zanzibar spot, 2s. 11½d. per 1b. for standard grade; shipment, 2s. 8¼d., c.i.f.

GINGER. — (Per cwt.). African spot 435s.; shipment, 420s. per cwt., c.i.f. Jamaican No. 3 spot, 630s., nominal; shipment, not offered. Cochin, spot, 195s.; shipment, 187s. 6d., c.i.f.

HONEY. — (Per cwt.). Australian light amber, 100s. to 105s. and medium amber supplies short at 97s. 6d. to 102s. 6d. Argentine, 122s. 6d. to 127s. 6d.; Jamaican, 115s. to 120s.; Canadian clover, 150s. to 155s. Mexican, 110s. to 115s. ex warehouse. house.

IPECACUANHA. — Spot: Colombian, 65s. per lb., ex wharf. Shipment (c.i.f.): Colombian, 59s. 6d. per lb.; Costa Rican, 80s., nominal. Nicaraguan and Brazilian not quoted.

JUNIPER BERRIES. — Hungarian, 95s. per cwt., spot.

Karaya. — No. 1 gum. spot nominal; No. 2, 285s. per cwt.

Kola nuts. — African $5\frac{1}{2}$ d. spot and $4\frac{1}{4}$ d., c.i.f. (per lb.).

Lanolin. — Anhydrous B.P. is from 140s. to 155s, per cwt. in 1-ton lots delivered, free drums.

LEMON PEEL.—Spot, 2s. 3d. per lb.

Linseed. — Whole, 75s. per cwt.; crushed, 105s.

LIQUORICE. — Natural root: Russian 65s. per cwt.; Anatolian, 57s. 6d.; Persian, 52s. 6d.; Sicilian 1-kilo bundles, 1s. 6d. per 1b. Block juice: Anatolian from 200s. per cwt.; Italian stick from 392s. to 470s. per cwt.

LOBELIA HERB.—American spot, 6s. 3d. per 1b.

MACE. — Whole, pale blade, 21s. per lb. spot.

Malefern.—Root for shipment quoted at 75s. per cwt., c.i.f.

MENTHOL.—Chinese: spot, 50s. per lb. duty paid; October-November shipment, 42s. 6d., c.i.f. Brazilian, 29s. in bond; 25s. 6d., c.i.f. Formosan, 31s. in bond; September shipment, 29s., c.i.f.

MERCURY.—About £61 10s. per flask of

NUTMEGS. — West Indian 80's, 7s. 3d. per lb., spot; sound unassorted, 4s. 9d.; defectives, 4s.

Nux vomica.—Cochin, 75s. per cwt. on the spot.

Orange peel. — Spot: Sweet ribbon, 1s, 10d, per lb.; bitter quarters: West Indian, 11½d.; Spanish, 1s.; bitter ribbon,

Papain.—No. 1, 30s. per lb., spot. For shipment: Congo, 26s. 6d., c.i.f.; East African, 26s., c.i.f.

PEPPER. — White Sarawak spot, 3s. 1d. to 3s. 2d. per lb. as to quality; shipment, 2s. 11d., c.i.f. Black Sarawak spot, 2s. 6d.; shipment, 2s. 3\frac{3}{4}d., c.i.f. Black Malabar, 310s. per cwt. spot; shipment, dearer at 305s., c.i.f.

PEPPERMINT. — Dutch whole leaves, 3s. per lb., c.i.f.

PIMENTO.—Spot, 616s. per cwt. nominal; shipment, 500s., f.o.b.

PODOPHYLLUM. — Emodi for shipment, 225s. per cwt., c.i.f.; Peltatum, 365s. per cwt., spot.

Pyrethrum. — Extracts—partially waxed, 25 per cent. pyrethrins, 74s. 6d. to 65s. 6d. per lb.; decolourised dewaxed. 20 per cent., 66s. 6d. to 59s. 4d. per lb.

Quassia.—Spot 57s. 6d. per cwt.

QUILLAIA.—Spot 230s. per cwt. nominal. Shipment no offers.

RHUBARB. — Chinese small rounds from 4s. 6d. per lb. on the spot.

SAFFRON. — Mancha superior, 160s. to 165s. per lb. spot.

SARSAPARILLA. -Jamaican native red spot, 2s. 6d. per lb.; prompt shipment, 2s. 1d., c.i.f.

28. 1d., c.i.f.

SEEDS. — (Per cwt.). ANISE.—Syrian, 280s., in bond. CARAWAY. — Dutch, 157s. 6d., duty paid. CELERY.—Indian, 265s.; October shipment, 240s., c.i.f. CORIANDER.—Moroccan, 55s., duty paid; Indian, 54s.; Moroccan for October shipment, 38s. 6d., c.i.f. CUMIN.—Cyprian, 170s.; Iranian, 170s., duty paid; shipment, Iranian, 140s., c.i.f. DILL.—Indian, 85s.; shipment, 64s., c.i.f. FENNEL. — Indian, 115s.; shipment, 112s. 6d., c.i.f. FENUGREEK.—Moroccan, 62s., 6d., duty paid; shipment, 45s., c.i.f. MUSTARD.—English, 67s. 6d. to 85s., according to quality.

SENEGA.—New crop 16s. per lb., c.i.f.;

SENEGA.—New crop 16s. per lb., c.i.f.; spot, 16s.

SENNA. — (Per lb.). Tinnevelly LEAVES, spot: Prime No. 1, 2s. 1½d.; prime No. 2 1s. 9d.; No. 3, f.a.q.. 1s. 2½d. Pods: hand-picked. spot 2s 1d.; manufacturing limited stocks 1s. 8d. Alexandria pods: Manufacturing, 2s.; hand-picked, small lots from 5s. 3d. to 8s. as to quality.

SHELLAC. — F.O.T.N., 190s. per cwt.; No. 1, 205s.; F.O., 220s. to 270s., spot.

SQUILL.—White nominally 80s. per cwt. on the spot; new crop quoted at 75s., c.i.f.

STRAMONIUM.—Continental LEAVES 85s. per cwt. spot.

STYRAX.—Spot, 22s. 6d. per lb.

TONOUIN BEANS.—Para spot, 5s. 9d. per lb.; shipment, 5s. 2d., c.i.f.

Tragacanth. — No. 1 ribbon, £132 10s. to £135 per cwt. No. 2, £125 to £127 10s.

TURMERIC. — Madras finger quoted at 162s. 6d. per cwt. spot; shipment, 159s.

Valerian root. — Spot: East European, 175s. per cwt.; Indian, 180s. Shipment: Continental, 172s. 6d., c.i.f.

Vanillin.—Rates (per lb.) are now:—5-cwt. lots, 21s. 6d.; 1-cwt, 21s. 9d.; 56-lb., 22s.; small quantities, 22s. 6d.

WAXES. — (Per cwt.). BEES'.—Dar-es-Salaam, spot, 470s.; shipment, 465s., c.i.f.. Abvssinian for shipment, 390s., c.i.f. Sudanese, spot, 430s.; shipment, 385s., c.i.f. Candelilla, spot, 485s.; forward, 460s. landed. Carnauba, fatty grey, spot, 355s.; shipment, 315s., c.i.f.; prime vellow spot, 600s.; shipment, 565s. c.i.f. 355s.; shipment, 315s., c.i.f.; pringellow, spot, 600s.; shipment, 565s., c.i.f.

WITCH HAZEL LEAVES. — Spot quotations are 2s. 11d. lb.

Essential and Expressed Oils

Arachis. — Spot, 2–5 tons lots naked ex mill, £128 per ton.

BAY.—West Indian about 25s, per lb. on the spot.

CALAMUS.—Spot 56s. 6d. per lb.

Cananga.—Spot, 27s. per 1b.

Caraway.—Imported oil, 35s. per lb.

CELERY SEED.—From 96s. per lb.

CHENOPODIUM.—About 35s. per 1b. in original containers.

CINNAMON.—From quillings, best English-distilled, 520s. to 800s. per lb. as to quantity; other B.P. oils from 85s. per lb. Ceylon leaf, 12s.; Seychelles, 7s., spot.

CITRONELLA. — Ceylon, spot, 7s. 7½d.; shipment, 7s. 6d. per lb., c.i.f. Formosan, 10s. 6d. in bond, shipment, 9s. 3d., c.i.f.; Chinese, 8s. 10d., c.i.f.; spot, 9s. 6d. in

CLOVE.—Madagascar leaf spot, 8s. 14d. per lb., duty paid; shipment, 6s. 11d., c.i.f. RECTIFIED 87–88 per cent., 12s. Distilled bud-oil, English, B.P., 27s. for 1-cwt.

Cod-Liver. — B.P. is 11s. 6d. per gall. including charged returnable drums. Veterinary is from 9s. 6d. per gall. Delivered terms, 25-stone lots.

Coriander.—B.P. oil, 46s. per lb., spot. CUBEB.—Spot supplies of imported are 85s. per 1b.

FENNEL. — Spanish sweet, spot, 10s. per

GINGER.—Imported: Jamaican, 130s. per .; Chinese, 72s. 6d., duty paid. English 135s.

GRAPEFRUIT.—Florida, 15s. 6d. per lb.

LAVENDER SPIKE.—Spanish, 12s. 6d. per lb. for original drums.

LEMON.—Californian best, 26s. per lb., U.S.P. grade, 20s.; Sicilian, machine-pressed, old crop, 26s. Terpeneless, 320s.

LEMONGRASS.—Spot, 12s. per lb.; October shipment, 10s. 6d., c.i.f.

LIME.—West Indian distilled, 47s. 6d. to 48s. per lb. on the spot.

NUTMEG.—Imported B.P. oil is from 36s. to 76s. per lb. as to source. distilled, 132s. 6d. English

Orange.—Floridan sweet oil, 3s. per lb.; West Indian, 3s. 6d.; West African, 14s. 6d.; Californian, 7s. 6d.; Israeli, 5s.;

Terpeneless, 225s.

PATCHOULI. — Penang is 23s. 6d., duty paid and 19s. 6d., c.i.f., per 1b.

PEPPERMINT. — Arvensis: Chinese spot, 21s, 6d.; shipment, 18s, 6d., c.i.f. Brazilian spot, 9s. 3d.; October shipment, 8s. 9d., c.i.f. *Piperita:* Italian, 48s, per lb. spot, American from 26s, to 28s, per lb, as to make.

Petitgrain.—Paraguay. 18s. 6d. per lb., spot; shipment, 17s. 9d., c.i.f.

PIMENTO. — English-distilled berry from 135s. per lb.; imported, 32s. 6d. Rectified leaf, 19s. 6d. per lb.

PINE. — Pumilionis 32s. per 1b.; sylvestris, 9s., abietis, 15s.

ROSEMARY.—Spanish is 9s. per lb. spot. Rue.—Spanish is 23s, 6d. per lb. spot. SAGE.—Spanish 9s. per lb., Dalmatian,

Sandalwood. — Spot Mysore, 145s. per lb.; forward, East Indian, 134s., c.i.f.

Sassafras. — Brazilian is from 2s. 3d. per lb., duty paid.

Spearmint.—American oil on the spot 26s, per lb.

Tangerine. — Sicilian machine pressed, 30s.; sponge pressed, 40s. per 1b.

VETIVERT.—Bourbon spot, 95s. to 105s. per lb.; shipment, 95s., c.i.f.

WINTERGREEN.—Natural, 35s. per lb.

YLANG-YLANG. — Best oil quoted about 145s. lb.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Monday, October 8

COLCHESTER BRANCH, PHARMACEUTICAL SOCIETY, George hotel, Colchester, at 8 p.m. Address on "The Work of the Consumers' Association."

CONVENTION OF ITALIAN CHEMISTS and CHEMICAL EQUIPMENT EXHIBITION, Teatro dell'Arte, Milan, Italy. (Until October 14.)

DONCASTER BRANCH, PHARMACEUTICAL SOCIETY, Ivanhoe hotel, Sprotborough, at 8 p.m. Mr. L. Priest on "The treatment of depression and anxiety states during the past ten years."

HARROW BRANCH, PHARMACEUTICAL SOCIETY, Conservative club, Lowlands Road, Harrow, at 8 p.m. Mr. F. W. Adams (secretary and registrar, Pharmaceutical Society) on "The Report of the Committee on the General Practice of Pharmacy."

LONDON SECTION, ROYAL INSTITUTE OF CHEMI-STRY, Ewell County Technical College, Reigate Road, Ewell, at 6,30 p.m. Dr. H. J. Cluley on Complexometric Analysis."

NORTH LONDON PHARMACEUTICAL ASSOCIATION AND Branch, Beale's restaurant, 368 Holloway Road. London, N.7, at 7.45 p.m. Dr. F. E. Camps on "Poisoning—Accident, Suicide or Murder?"

REINFORCED PLASTICS GROUP, PLASTICS INSTITUTE, Wellcome Building, Euston Road, London, N.W.2, at 4 p.m. Symposium on "Design Considerations in Three Different Fields."

Tuesday, October 9

COVENTRY AND WARWICKSHIRE BRANCH, PHARMA-CEUTICAL SOCIETY, Craven Arms hotel, High Street, Coventry, at 8 p.m. Photographic evening and slide competition,

METROPOLITAN BRANCH, PHARMACEUTICAL Society, Swan hotel, Stratford, at 8 p.m. Film "Conovid—the Oral Contraceptive" by G. D. Searle & Co., Ltd.

GLASGOW PHARMACY CLUB, Craig's tearooms, Sauchiehall Street, Glasgow, at 7 p.m. Whist drive.

GUILDFORD BRANCH, PHARMACEUTICAL SOCIETY, Prince of Wales hotel, Guildford, at 7.30 p.m. Mr. T. Raymond Reid on "Reducing Costs in Retail Pharmacy."

LONDON SECTION and CHEMICAL ENGINEERING GROUP, SOCJETY OF CHEMICAL INDUSTRY, 14

Belgrave Square, London, S.W.1, at 6 Messrs, C. E. Faulkner and L. E. Parsons (International Business Machines (U.K.), Ltd.) on "The Use of Computers for the Control of Continuous Processes."

LONDON SECTION, ROYAL INSTITUTE OF CHEMI-STRY, Brighton Technical College, Brighton, at 6,30 p.m. Mr. R. C. Chirnside on "Gemstones and Jewels—Natural and Synthetic."

Notingham Branch, Pharmaceutical Society, Medico-Chirurgical Society's House, 64 St. James's Street, Nottingham, at 7.30 p.m. Address by Mr. P. A. Lincoln (technical director, Milton Pharmaceuticals, Ltd.) on cross-in-

fection, Film "My True Account."
SCHOOL OF PHARMACY, CHELSEA COLLEGE OF SCIENCE AND TECHNOLOGY, Manresa Road, London, S.W.3, at 7.15 p.m. Extension lecture on

"Recent Advances in Medicinal Chemistry."

SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY,
Royal Victoria hotel, Sheffield, at 8 p.m. Mr.
C. C. Stevens on "Insurance Law and C. C. Stevens on Practice,"

SOUTH-EAST METROPOLITAN BRANCH, PHARMACEUTI-CAL SOCIETY, Yorkshire Grey hotel ballroom, Eltham Road, London, S.E.9, at 8 p.m. Benevolent Fund dance.

Wednesday, October 10

BIRMINGHAM PHARMACEUTICAL ASSOCIATION and DEPARTMENT OF PHARMACY AND BIOLOGY, Birmingham College of Advanced Technology. Annual students' prizegiving Presentation and Address by Dr. F. L. Rose (research manager, pharmaceuticals division, Imperial Chemical Industries, Ltd.).

CHESTERFIELD BRANCH, PHARMACEUTICAL SOCIETY, Station hotel, Chesterfield, at 8 p.m. Mr. R. Williams (A. L. Vallance, Ltd.) on "Colour

Photography Today."
ENFIELD CHEMISTS' ASSOCIATION, Firs Hall, Winchmore Hill, London, N.21, at 8 p.m.

Supper dance.

ISLE OF WIGHT BRANCH, PHARMACEUTICAL SOCIETY, St. Mary's Hospital, Parkhurst, Isle of Wight, at 7.30 p.m. Medical film show.

MANCHESTER BRANCH, GUILD OF PUBLIC PHARMAcists, Literary and Philosophical Society, 30 George Street, Manchester, 1, at 7.30 p.m. Formulation of motions for Branch Delegates'

MANCHESTER PHARMACEUTICAL GOLFING SOCIETY. Bramhall golf club, Fixture, President's prize and prize distribution.

School of Pharmacy, University of London, Brunswick Square, London, W.C.1, at 3 p.m. Inaugural meeting of the 21st session. Sir Zachary Cope on "The Influence of Pharmacy upon Surgery."

SOCIETY FOR ANALYTICAL CHEMISTRY, meeting room, Chemical Society, Burlington House, London, W.1. Presentation of three papers on "Recent Developments in Polarography."

SWANSEA AND WEST GLAMORGAN BRANCH, PHAR-MACEUTICAL SOCIETY, Dragon hotel, Swansea, at 7.45 p.m. Mr. H. P. Jenkins on "Wines and Spirits "

WESTERN PHARMACISTS ASSOCIATION BRANCH, Great Western Royal hotel, Paddington Station, London, W.2, at 7.30 p.m. Dr. S. J. Corne (Parke, Davis & Co.) on "Drug Addiction.'

Thursday, October 11

DURHAM COUNTY BRANCH, PHARMACEUTICAL SOCIETY, Three Tuns hotel, New Elvet, Durham, at 7.45 p.m. Mr. E. A. Brocklehurst (a member of Council) on "Pharmacy and the North-cast."

EDINBURGH AND SOUTH-EASTERN SCOTTISH BRANCH. PHARMACEUTICAL SOCIETY, Pharmacy Department, Heriot-Watt College, 79 Grassmarket. Edinburgh, at 8 p.m. Extension course on the use of modern drugs. Mr. J. McC. Murdoch on "Antibiotics and Chemotherapy."

HOUNSLOW BRANCH, PHARMACEUTICAL SOCIETY.
Parke, Davis staff restaurant, Parke, Davis & Co., Staines Road, Hounslow, at 8 p.m. Dr. J. F. Cavalla (senior research chemist, Parke. Davis & Co.) on "The Relief of Pain."

LEEDS BRANCH, PHARMACFUTICAL SOCIETY, Metropole hotel, Leeds, at 8 p.m. Dr. C. R. Blagg on "Diuresis" (film).

LONDON SECTION, ROYAL INSTITUTE OF CHEMISTRY. Wimbledon Park golf club, Home Park Road, London, S.W.19, at 9 a.m. Autumn golf meet-

NORTHERN SCOTTISH BRANCH, PHARMACEUTICAL Society, Royal hotel, Inverness, at 8 p.m. Taperecorded lecture on "Tranquillisers" by Dr. G. R. Boyes, Appointment of Branch Representatives to the British Pharmaceutical Conference 1963.

SCHOOL OF PHARMACY, CHELSEA COLLEGE OF SCIENCE AND TECHNOLOGY, Manresa Road, London, S.W.3 at 7.15 p.m. Extension lecture on "The Application of Some Advanced Techniques to Pharmacy."

ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE. Charterhouse Square, London, E.C.1, at 5.30 p.m. Special University of London lecture in pharmacology, Professor F, C, MacIntosh (professor of physiology, McGill University) on "Acetylcholine turnover at nerve endings,"

Friday, October 12 WESTERN SECTION, SOCIETY FOR ANALYTICAL CHEMISTRY and MID-SOUTHERN COUNTIES SEC-TION, ROYAL INSTITUTE OF CHEMISTRY, Training College, the Close, Salisbury, Wilts, at 7.45 p.m. Miss M. Olliver on "The Rôle of the Analyst in the Food Industry."

Advance Information

LONDON NURSING EXHIBITION, Scymour Hall, Seymour Place, London, W.1, October 22-26.
ROYAL DAIRY SHOW, Olympia, London, W.14. October 23-26.

WILLS

Mr. W. 1. EDWARDS, M.P.S., 509 Staines , Bedfont, Feltham, Middlesex, left £30,164 (£27,115 net).

MR. A. G. FELTON, M.P.S., 4 Northampton Park, London, N.1, left £8,424 (£7,067 net).

MR. F. A. FRIDAY, Gladnor House, Marsham Lane, Gerrards Cross, Bucks (late economic ad-Resale Price Maintenance Co-ordinating Committee), left £7,303 (£4,361 net).

MR. A. HARROP, M.P.S., Mulgrave House. Hinderwell, Yorks, left £7,480 (£6,348 net).

COMMERCIAL TELEVISION

Figures in these columns represent number of appearances of the "spot" during the week.

October 14-20		London	Midland	North	Seotland	Wales	South	Z.E.	Anglia	Ulster	Westward	Border	Grampian	Eireann	Chan, Is.
4711 eau de Cologne		3	3	_	_	_	3	_	_	_	_	_	_	_	_
Anadin		2	4	_		—	_	—	2	3	—	—	—	—	—
Andrews liver salt		1	1	1	2	1	1	1	—	1	4	1	2	_	-
Antoine Salon Set		2	4	2	2	3	2	2	2	1	_	1	1	—	_
Askit		_	_	_	14	—	_	_	_	_	_	7	—	—	—
Aspro		3	3	3	3	3	3	3	3	2	4	3	6	—	_
Beecham powders		6	4	4	5	5	6	5	5	6	7	5	7	_	<u> </u>
Chandau hair spray and lacquer		_	2	1	_				_		_	_	-	_	—
Coldrex		1	1	1	1	1	1	_	1	1	1	1	1	-	_
Cuticura		_	_	_	1	_	_	_	_	1	_	_			_
Delrosa		2	2	2	2	2	2	2	3	2	2	2	2	-	_
Dinneford's compound magnesia		1	1	1	_	1	1	1	1	_	_	_	_		—
Ekco electric blankets		_	_	_	_	1	-	-		1	_	_			_
Factor for Men		2	3	3	4	3	4	4	3	3	2	4	4		_
Farley's infant food				_	_	_	1	_	1	1	_	_		_	_
Germolene		1	_	1	_	1	1	1	1	_	_	$\overline{}$	_	_	_
Goddard's cream and embrocation		1	1	_	—	_	_	_	_	_	_	_	_	_	_
Kolynos fluoride tooth-paste		_	1	_	1	_	_	_	_	-	_				_
Milk of Magnesia tablets		2	2	3	2	2	3	2	3	3	3	3	3	_	2
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Spoolie hair curlers		_	_	1	_				_	_	_	1	_	$\overline{}$	_
Sunbeam electric shaver		1	1	1	1	1	1	1	1	1	1	_	_		_
VO-5 conditioner		1	1	1	1	_	_	_	_		_	_	_		—
Get Set	• •	2	1	2	1	_	_	_	_	_	-	_	_	_	-
hair spray		2	2	3	I	_	_	_	_	_	_	_	_	_	_
Wright's coal tar soap	• •	3		-	_		_	_	_	<u> </u>	_	_	_	_	—
Yeast-Vite	• •	2	3	2	2	2	2	2	2	2	2	2	2	_	_

NOTES ON **NEW MEDICAMENTS**

ADCORTYL-AQ.—Constituents: acetonide and chlorhydroxyquinoline. The acetonide of triamcinolone is a highly effective derivative of a powerful corticosteroid, and is intended for local application. Chlorhydroxyquinoline has antibacterial and antifungal properties; the presence of such a compound is useful in preventing or treating any secondary invasion of inflamed skin conditions. Triamcinolone acetonide occurs in several other products for local use, including Adcortyl A, Adcortyl A with Graneodin, Ledercort acetonide and Ledercort acetonide with neomycin.

CONTAX.—Chemistry: 3-3 Bis (para-acetoxy phenyl)oxindole, or acetphenolisatin. The compound is a locally acting peristaltic stimulant. It is not absorbed when given orally, but acts upon the bowel, and is excreted completely in the fæces. The drug is also present in Cirotyl. Products containing related compounds with a similar action include Dulcolax (bisacodyl) and Veripaque (dihydroxyphenylisatin).

FEMIPAUSIN,-Constituents: Methyl testosterone and ethinyl œstradiol. The latter is one of the most powerful æstrogens available, and is widely used in a variety of conditions requiring æstrogen therapy. In the treatment of menopausal conditions, the action of estrogens is potentiated by the addition of small doses of androgens, and such combined treatment also reduces certain side-effects of æstrogen administration. Other products formulated on a similar pharmacological basis include Primodian, Mixogen and Mepilin, which contain methyl testosterone and ethinyl æstradiol. Pausandryl contains ethinylæstradiol in association with methylandrostanolone.

GOMAXIDE.—Constituents: Chlorinated xylenols and chlorophyll. The chloroxylenols generally are potent and non-irritant bactericides of low toxicity, and form the active constituents of a wide range of non-caustic antiseptic products. Chlorophyll is used as a colouring agent in soaps, and is claimed to have deordorant properties.

SCHERICUR. - Constituents: Hydrocortisone, clemizole and hexachlorophane. Clemizole is an imidazoline derivative with antihistamine and anti-allergic properties; in allergic and inflamed skin conditions it supplements the anti-inflammatory action of hydrocortisone. Hexachlorophane, present with clemizole as a complex, has marked antibacterial properties, and inhibits the secondary bacterial invasion of inflamed areas. Clemizole is also available as Allercur; Scheriproct is formulated on similar lines, but also contains dibucaine (cinchocaine) as a local anæsthetic.

SERENESIL,—Chemistry: 5-Chloro-3-ethylpent-1en-4-yn-3-ol, also referred to as ethchlorvynol, The compound is a tertiary acetylenic carbinol with mild hypnotic and muscle relaxant properties. It is more active than related unchlorinated derivatives. Another unsaturated aliphatic carbinol is methylpentynol, available as Oblivon, Atempol and Insomnol. Oblivon-C, methylpentynol carbamate, has a longer action than the free base.

CONTEMPORARY **THEMES**

Subjects of contributions in current medical and technical periodicals

BRL 1621: a comparison with other isoxazolyl

penicillins, *Brit. med, J.*, September 29. BRL 1621: A new orally effective penicillinase-stable penicillin. *Lancet*, September 29.

AMPICILLIN. Sensitivity of mouse pneumonitis organisms to, *Brit. med. J.*, September 29. LONG-TERM ANTICOAGULANT THERAPY after myocar-

dial infarction. Laucet, September 29. ISOXAZOLYL PENICILLINS and penicillinase. Nature,

September 29.

ASPERGILLUS flavus EXTRACTS. Hepatotoxic action of chromatographically separated fractions of. Nature, September 29.
HUMAN CANCER VIRUSES. The quest for, Science,

September 14.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," September 12 For cleaning, polishing, scouring and abrasive preparations (3) and for disinfectants; antiseptics; sanitary substances; preparations for killing weeds and destroying vermin; and insecticides (5)

DIVERSOL BX WITH AEROLUM, 833,589-90, by Diversey (U.K.), Ltd., London, W.1. For bismuth aluminate, bismuth nitrate, dextro moramide, dilutamide and ferrous glycine sulphate, all being pharmaceutical substances (5) M.C.P., 806,830, by Mining & Chemical Pro-

ducts, Ltd., London, W.C.2.

For pharmaceutical preparations and substances for the treatment of sexual neurasthenia, impotency, debility and frigidity in men and women, and concomitant symptoms of such organic and psychic disturbances (5)

TENTEX, 823,146, by Himalaya Drug Co., Bombay 1, India.

For all Goods (5)

QUINALDOX, 822,780, by A/S Dumex (Dumex. Ltd.), Copenhagen S, Denmark. FEVILIN, 831,213, by Glaxo Laboratories, Ltd., Greenford, Middlesex. MANTADIL, 832,329, by Wellcome Foundation, Ltd., London, N.W.1. GEVRITE, 833,364, by American Cyanamid Co., New York, U.S.A.
For pharmaceutical preparations and substances

for human and veterinary use, and insecticides

DOVIP, 823,487, by CIBA, Ltd., Basle, Switzerland.

For pharmaceutical preparations in tablet form

for human use (5)
CARDANE, 824,238, by Maggioni & C. S.p.A., Milan, Italy,

For pharmaceutical preparations for use in human medicine (5)

DIAMEDANE, 824,239, by Maggioni & C. S.p.A., Milan, Italy.

For laxatives of plant origin (5)
PURGOPLEX, 824,553, by Dr. Madaus & Co., Koln-Merheim, Western Germany,

For fungicides and preparations for killing weeds; insecticides, acaricides, pesticides and preparations for killing vermin; disinfectants (5)

SABITHANE, 828,936, by Rohm & Haas Co., Philadelphia, Pennsylvania, U.S.A.

For steroids, autispasmodics, sulphonamides, trauquillisers, enzymes, vitamius, anticholinergics, hypotensive and hypertensive preparations, and evacuants, all being medicines for human use (5) SUSTETS, 824,751, by American Cyanamid Co., New York, U.S.A.

For dietetic foods (5)

AVICEL, 825,208 by American-Viscose Corporation, Wilmington, Delaware, U.S.A., and Philadelphia, Pennsylvania, U.S.A.

For auti-thallophytic preparations and substances (5)

FUNGOLEX, 830,258, by Shell International Petroleum Co., Ltd., London, E.C.3.

For pharmaceutical and veterinary preparations and substances (5)

BOMETHON, 830,704, by Beecham Research Laboratories, Ltd., Brentford, Middlesex, For veterinary preparations (5) STREKACIN, 831,817, by E. R. Squibb &

Sons, Ltd., London, W.1. For medicinal herbs (5)

PLANET HERBS, 831,915, by Planet Herbal Laboratories, Hove, Sussex. For preparations for killing weeds and destroying

vermin (5) DERATION, 832,090, by Cela Landwirtschaft-

I'che Chemikalien, G.m.b.H., Ingelheim-on-Rhine Germany.

For pharmaceutical preparatious and substances (5) ISO-BROVON, 833,701, by Moore Medicinal Products, Ltd., Aberdeen, Scotland, NEOKETS, 834,208, by Boots Pure Drug Co., Ltd., Nottingham.

For optical, photographic and ciuematographic apparatus and instruments, and parts and fittings

MINSTER, 826,488, by Minster Trading Co. (London), Ltd., London, W.2.

For surgical sutures, and bandages (10)

Device, 814,100, by Veb Thüringisches Kunst-faserwerk "Wilhelm Pieck" Schwarza, Rudostadt 2. Germany.

PATENTS

COMPLETE SPECIFICATIONS ACCEPTED From the "Official Journal (Patents)," September 19.

4-chloro-3-sulphamyl benzamides. British Drug Houses, Ltd. 909,751.

Gibberellic acid derivative, Imperial Chemical Industries, Ltd. 909,752.

Manufacture of derivatives of nitrofuran, Norwich Pharmacal Co. 909,876-78-79.

3-amino-2-imidazolidinethiones. Norwich Pharmacal Co. 909,877.

Preservation of compounds liable to oxidation.

Imperial Chemical Industries, Ltd. 909,753.

Basically-substituted esters of α -phenyl- α -isopropyl glycollic acid, Farbenfabriken Bayer, A.G.

Stabilised hydrogen peroxide, Chemical Construc-

tion Corporation, 909,945.

Cosmetic skin preparations containing low gel strength, low viscosity gelation. T. J. Lewis. 910.004

6α-methyl-16-alkylidene steroids. British Drug Houses, Ltd. 910,118.

Process for inhibiting the growth of plants. Français, Etat. and Institut National de la Recherche Agronomique, 910,022.

Stabilised fungicidal mixture, E, I, Du Pont De Nemours & Co. 910,071.

Device for automatically effecting injections with a hypodermic syringe. D. T. Lewis, 909,898.

Spinal supports. Pryor & Howard, Ltd. 909,970. Artificial spouge structures of regenerated cellu-lose, E. I. Du Pont De Nemours & Co. 909,944.

Photographic colour processes. Kodak, Ltd. 909,824.

Photographic cameras, more especially cine-cameras, including photo-electric diaphragm control means. Agfa, A.G. 909,863.

Mechanism for focusing photographic cameras, H. Deckel and F. W. Deckel, 909,796.

Ever-ready cases for photographic cameras, R. Heidecke and H. Franke (trading as Franke for the following photographic cameras). Fabrik Photogr, Prazisions-& Heidecke, apparate), 909,967.

British patent specifications relating to the above will be obtainable (price 4s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2, from November 7.

PRINT AND PUBLICITY

PUBLICATIONS Medical Propaganda

Manufacturers' leaflets, folders, booklets, etc., directed to doctors but available to pharmacists. BOOTS PURE DRUG CO., LTD., 37 Station Street, Nottingham: "In cases of nasal congestion . . . Fenox nasal drops and nasal spray" folder).

HORLICKS, LTD., Pharmaceutical division, Slough, Bucks: "Pristacin . . . bactericidal chewing gum" (information card).

MAY & BAKER, LTD., Dagenham, Essex: "For insect bites and stings . . . Anthisan cream," "Largactil . . . sets the standard by which other drugs over a similar range of indications are assessed," "When infection is at hand when intection is at hand

. . Streptotriad for all stages of bacillary
dysentery" (blotters); "For the oral treatment
of itching . . Vallergan" (4-p. folder).

MERCK, SHARP & DOHME, LTD., Hoddesdon,

Herts: "Cogentin . . . for effective symptomatic relief in parkinson's syndrome" (6-p folder); "Aldomet . . . a new and completely different antihypertensive agent with significant advantages," "A full antidiarrheal range . . . Cremosuxidine, Cremostrep, Cremomycin for flexibility in treatment," "Daranide its place in the treatment of respiratory insufficiency," "For the 'problem' asthmatic Decadron may provide the answer," "Decaspray . . for convenience and economy in corticosteroid therapy," "In diuretic therapy . . . HydroSaluric-K to reduce the risk of potassium depletion," "Tryptizol . . . effective relief of depression and prompt control of

associated anxiety "(4-p. folders).

PHARMETHICALS (LONDON), LTD. (for Schering, A.G., Berlin), Victoria Way, Burgess Hill, Sussex: "Primolut N in menorrhagia" (4-p. folder); "Schericur . . . dermatological ointment" (8-p. hooklet)

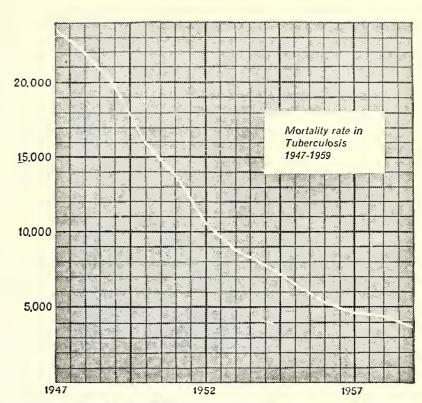
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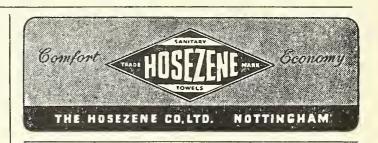
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Dark Warm Brown
Mid-Brown
Mid-Warm Brown
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FOR NEWS

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RETAIL AT 8/6d. INCLUDING TAX

U.K. DISTRIBUTORS

PRACTICAL PHARMACEUTICALS LTD.

37 JESMOND ROAD · NEWCASTLE UPON TYNE 2



No. 5 NYLON Guaranteed 10 years, six styles in assorted colours, 1/4d. to 2/3d.



Guaranteed 1 year, six styles in assorted colours, 6d. to 1/-.



No. 1 Cabinet of six styles of new Super-Hylite combs, assorted colours.

BARNET SUPER HYLITE

A NEW COMB GUARANTEED 2 YEARS

In a wonderful new material, tough but so attractive, these superb new combs retail at only 9d. to 1/6d. to sell fast from these elegant crystal cabinets. This is just one from the new Barnet range of eight cabinets ready priced.

Wholesale only.

E. R. HOLLOWAY SALES LIMITED . BESSEMER ROAD . WELWYN GARDEN CITY . HERTS. Tel: Wel. Gar. 24444

Big Woman's Realm promotion gives great support to RONSON HAIR DRYERS



Colourful 8-page hair-care booklet expertly written to promote Ronson hair dryers—and *free* with every October 13 issue of Woman's Realm.

1,300,000 women will see how easy home-hairdressing is with a Ronson Beauty Trio or a Hood'n'Comb.



Join in this great promotion This new poster, free from Ronson, is just an open invitation into your shop.

Specially written for you Extra copies of the booklet—display them on your counter in this *free* dispenser.

RONSON PRODUCTS LIMITED, LEATHERHEAD, SURREY. TELEPHONE: LEATHERHEAD 4444





CODEINE B.P.C. 1954
CODEINE PHOSPHATE B.P.
CODEINE PHOSPHATE
(TABLETTING QUALITY)

CODEINE HYDROCHLORIDE

CODEINE SULPHATE

ETHYLMORPHINE HYDROCHLORIDE B.F.C.

MORPHINE B.P.C. 1934



DRPHINE ACETATE B.P.C. 1934 DRPHINE HYDROCHLORIDE B.P. MORPHINE SULPHATE B.P.

M&B BRAND PHARMACEUTICALS

Manufactured by

MAY & BAKER LTD

DAGENHAM · ESSEX

Telephone: DOMinion 3060 Exts. 317 and 318



Introducing Miss

TANGEE

Beginning October 17th
Whole column advertisements
will be appearing fortnightly*
for a year in

by far the most powerful marketing medium for selling to women in Britain, reaching 51% of all women between 16 and 35 with every issue.

That's a very fine assurance of sales for you.

^{*}With a break at Christmas, re-commencing fortnightly from January 16th.



IN Moman

WOMAN has a readership of 8,380,000 women which is 41% of all women in the country. This is one of the most powerful sales coverages of its kind in the world. You can be sure that two out of every five women in your neighbourhood will be seeing the TANGEE advertisements. Be certain you have TANGEE in stock. WOMAN will do the rest.

Readership figures from IPA Survey, Jan.-Dec. 1961.



Charles Irving, Advertisement Manager, WOMAN, 96-98 LONG ACRE, LONDON, W.C.2. TELEPHONE TEMPLE BAR 2468



No. 191
Delightfully decorated classic french jar with Ambray bath crystals.

Retail 4/6d.

Exciting gift packed, the highly successful Ambray range launched last year, now comes in a wonderful BLUE ROSE series. See our delightful french jar of Blue Rose bath crystals, a permanent refillable jar that every woman will adore in her bathroom. This, with a high selling combination of coffrets, make a magnificent showing for top sales at Christmas.

BLUE ROSE





Exclusive Ambray gifts beautifully presented for high sales this Christmas at a price that will attract all purses.

TOILETRIES

Order early from your Wholesaler

DISTRIBUTED BY E. R. HOLLOWAY SALES LIMITED . BESSEMER ROAD . WELWYN GARDEN CITY . HERTS. TEL: WEL. GDN. 24444 (Wholesale only)



TANGEE in WOMAN

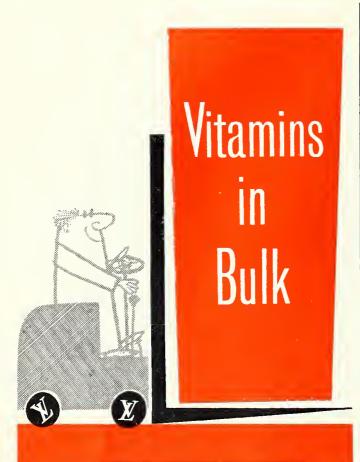
featuring the
NEW GOLD SWIVEL CASE

Starts October 17th

Sole Distributors

Spalton and Jennings Ltd

58 Gough Street London W.C.1. TER. 7183



Natural & Synthetic Vitamin A Vitamin B₁ (Aneurine Hydrochloride B.P.) Vitamin B.6 (Pyridoxine Hydrochloride B.P.C./U.S.P.) DL. Calcium Pantothenate U.S.P. Vitamin C. (Ascorbic Acid B.P.) Vitamin D₂ (Calciferol B.P./U.S.P.) Vitamin D₂ (Oily Concentrate) Natural Vitamin E (d-Alpha Tocopheryl Acetate) (d-Alpha Tocopheryl Acid Succinate) (Mixed Tocopherols) Natural Vitamin E. (Feed Grade) Felic Acid B.P./U.S.P. Inositol Nicotínic Acid B.P. Nicotinamide B.P.

Get your vitamins from VITAMINS LIMITED

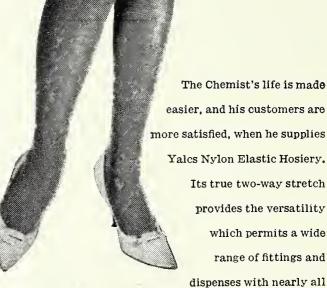
Bulk Sales Dept., Vitamins Limited (Dept. A.A.6) Upper Mall, London, W.6, Telephone: Riverside 5001 Telegroms: YITAMINS, LONDON, TELEX.

NO NEED FOR

MEASURING

AND FITTING

except in very abnormal cases





Obtainable under N.H.S. 48/- per pair



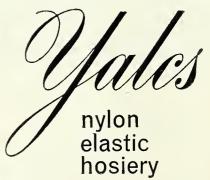
Full-footed, seamed Elegantly sheer 63/- per pair



Full-footed, Fashioned 48/- per pair



Mesh texture gives fine appearance on leg. 63/- per pair



special measurements. Leading

Chemists require Surgical Hose

that is second-to-none, plus

superlative service. Yalcs

is the complete answer.

Sales Agents: Glenside (London) Ltd., 37 Percy Street, London, W.1.

Distributors for Eire: Charnwood Laboratories, Davitt Road, Inchicore, Dublin, 12.

LENTON PRODUCTS LTD . Grove Road, Lenton, Nottingham

Winter photographic business up!

BIG ILFORD CHRISTMAS CARD SCHEME

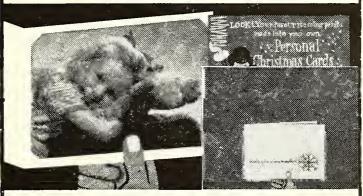
Leaflets mailed to users of colour film . . . bold advertisements . . . gay counter cards!

This year, Ilford will boost winter business by promoting a great Christmas Card Scheme. They will offer to make Christmas Cards from Ilfocolor negatives. Customers will bring their orders and negatives to you.

To promote the scheme, leaflets will be mailed out to people who use Ilford colour films...there will be special advertisements in Reader's Digest and the Sunday Times Colour Supplement and...

...THIS STRIKING
COUNTER CARD
WILL BE
AVAILABLE TO YOU—
WITH GIVE-AWAY
LEAFLETS

NOW! Personal Christmas Cards made from your own ILFORD colour prints



TODAY'S LEADER IN COLOUR ILFORD naturally!



Here are the details: there will be 2 types of Christmas Card. The Family Card, price 1/6 each from Ilfocolor negatives, and the De Luxe Card, price 1/9. Minimum order for either type of Christmas Card is six from any one original. Your margins will be similar to those on normal print orders—our representative will give you full information.

L137/E/62

TODAY'S LEADER IN COLOUR LFORD naturally!

Scene: A chemist's shop in the High Street.

Time: The present. An artist enters carrying a painting representing an umbrella and a sewing machine on a butcher's block.

CHEMIST: What does it mean?

Artist (Loftily): This painting symbolises the meeting of two distant realities upon an unconventional plane. . . .

CHEMIST (Gently): How long have you had stomach trouble?

ARTIST: Years. Can't eat. Can't sleep. I was wondering. Could I swap it for something better?

CHEMIST: Why, of course, I've the very thing. Specially made for agonised artists — and all who suffer from colds, flu', digestive upsets, gastric troubles and lack of sleep.

Artist: Give me the name — and I promise to go back to portraits.

CHEMIST: Bengers. It's predigested, you know. Soothes away all digestive upsets. There's nothing like it, anywhere.

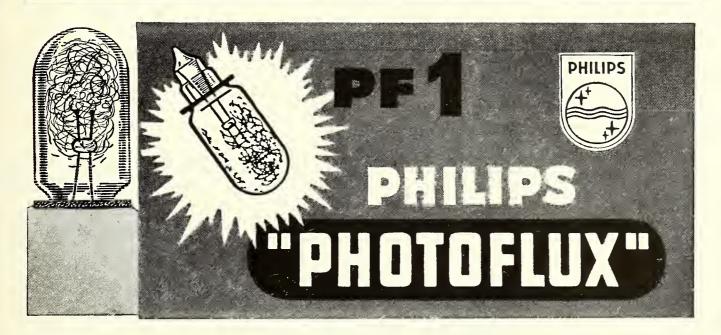
CHORUS (sings) Sales doubled and climbing daily. More people drinking Bengers than ever before. . . .



IT PAYS TO DISPLAY AND RECOMMEND BENGERS

Note: the characters in this story are fictitious. Only the facts about Bengers are true.

LET THE NEW "PHOTOFLUX" FLASHBULBS STIMULATE YOUR SALES—while saving you space!



Thanks to their new Zirconium fillings, the new "Photoflux" PF1 and PF1B Flashbulbs are even more compact. This not only makes them handier and more convenient for your customers to use, it makes them handier and much easier for you to stock: 200 bulbs in a box that's only $7\frac{1}{2}$ " x $7\frac{1}{2}$ " x 4". And they're so *very* easy to sell!

"Photoflux" PF1 and PF1B bulbs are supplied in sleeves of 5, or in standard boxes of 200. The popular "Photoflux" PF5 bulbs, with a light output of 18,000 lumen-seconds, are available as previously.



Antussin



STOCK DISPLAY SELL

Antussin

FOR EXTRA PROFITS THIS WINTER

Send this order— NOW! before October 26th



brings you EXTRA profit fast!

£11outlay £8 profit

See how it works out!

Every parcel contains 6 dozen 2oz. bottles and 1 dozen 4oz. bottles. That means you lay out £11.0.6; resell at £19.2.0; make £8.1.6 profit. Don't miss this big profit-making offer. It's equivalent to 16 2oz. bottles for the price of 12!

Powerful Nationwide TV Campaign From October 26th until March...

Dramatic 45-second commercials will make Antussin the most TV advertised cough-product this season... will tell your customers 'Antussin calms the nerves that make you cough'.

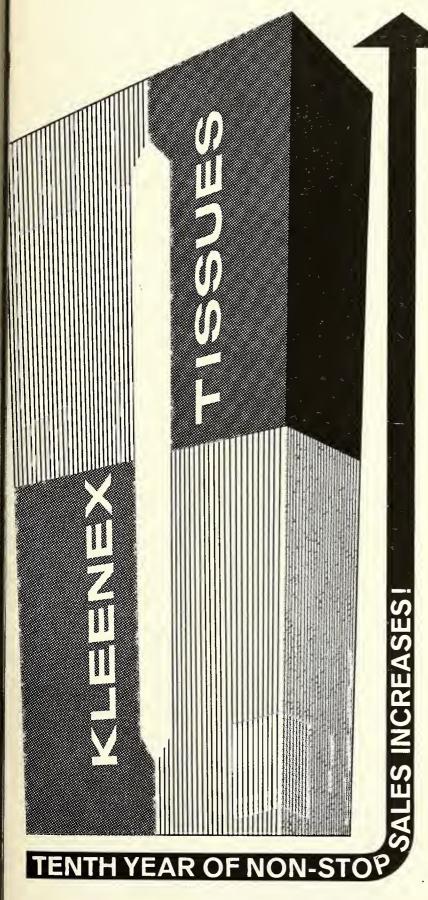
Cash-in on this wonderful money-making opportunity now And remember—this Bonus Offer closes on October 26th

To TOBAL	L LABORATORIES LIMITED, QUEENBOROUGH,	KENT
T	PRE-TV BONUS OFFER	
LEASE SUPPLY	Antussin Bonus Parcels TO ME	
AME		
ADDRESS		
	SIGNATURE	

(Available until 26 October 1962)



KLEENEX SALES DOUBLE ALLOTHER BRANDS!



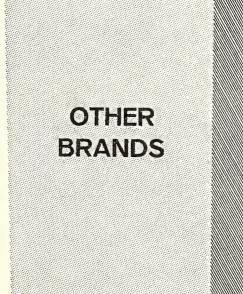
Yes! Today Kleenex* Tissues sell twice as much as all other brands combined! Here's proof that Kleenex is Britain's fastest selling tissue.

And Kleenex sales keep going up. This year sales are over 25% up on last year—and this marked the tenth continuous year of non-stop sales increases! What other tissue can show such a sales record?

Tops for sales—tops for advertising support too! This winter, Kleenex launches the biggest, brightest TV Tissue Campaign ever! Over a thousand commercials! Over twelve million viewers!

Remember! To pocket more profit, stock up and display fast-selling Kleenex now! Fast sales mean fast profits!

KLEENEX always makes the tissue headlines!



KIMBERLY-CLARK LIMITED, LARKFIELD, MAIDSTONE, KENT. Tel: Maidstone 7551 * Regd. T.M. Kimberly-Clark Corp.

An exciting range of hair cosmetics

from

eugène

Eugene offer you a great new sales opportunity ... a special range of hair cosmetics for home use! Quality products, attractively packed and priced, with the extra sales-appeal of the name that everyone knows so well. You'll find there's a ready market for all these wonderful new products from the famous house of Eugene!

Liquid Cream Shampoos

2 oz and 4 oz bottles, also in foil sachets Rose Cream, Lemon Cream & Amber Medicated

'Coiffure' Brushing-Out Cream

1 oz and 2 oz bottles

Fixogen hair-set ½ oz bottles

Hair Perfumes/Frictions 6 enchanting perfumes

Wisp Hair Lacquer
Aerosols, Hand Sprays and refills

Wisp Hair Set — Hand Spray and refills

Brilliantine - 4 perfumes

also Spruce Shampoo for Men

For details of prices and trade discounts write or telephone for details to:



EUGENE LTD., CROWN HOUSE, 143/147 REGENT STREET, LONDON, W.1 TEL: REGENT 3141 (5 LINES)



Every day more and more women are buying the Italian Glamour Match—MISSLYN Nail Varnish and Lipstick.

MISSLYN Nail Varnish DEFINITELY lasts longer—shines more brilliantly and pleases

better. Forceful advertising is planned for Womens' Magazines and local papers. Excellent and unusual 'selling' display material is available.

Line Retail Wholesale Price Per Dozen (Ex. P. Tax) Cream Varnish Pearl Varnish Complete Lipstick 10/6d. 45/- Normal Refill Oleumsolv Varnish Remover Misslyn "9001" Nail Hardener Retail Wholesale Price Per Dozen (Ex. P. Tax) 10/6d. 45/- 10/6d. 45/- 11d. 36/- 18/- 18/- 18/- 18/- 18/- 18/- 18/- 18				
Cream Varnish 5/6d. 34/- Pearl Varnish 7/11d. 48/- Complete Lipstick 10/6d. 64/- De Luxe Refill 7/6d. 45/- Normal Refill 5/11d. 36/- Oleumsolv Varnish Remover 2/11d. Misslyn "9001" 18/-				
Complete Lipstick 10/6d. 64/– De Luxe Refil 7/6d. 45/– Normal Refill 5/11d. 36/– Oleumsolv Varnish Remover 2/11d. 18/– Misslyn "9001"				
De Luxe Refill 7/6d. 45/- Normal Refill 5/11d. 36/- Oleumsolv Varnish Remover 2/11d. 18/- Misslyn "9001"				
Normal Refill 5/11d. 36/- Oleumsolv Varnish Remover Misslyn "9001" 2/11d. 18/-				
Oleumsolv Varnish Remover 2/11d. 18/- Misslyn "9001"				
Remover 2/11d. 18/- Misslyn "9001"				
Misslyn "9001"				
Nail Hardener 8/6d. 50/-				
TITIE!				
	_			
WO M LEOUNED				
IVO M. LECHNER				
ITALIAN LABS LTD.				

LONDON: 33 NEWMAN STREET W



E. ILLINGWORTH & CO. (Bradford) Ltd.

COTTON WOOLS

ILLMOND-COTTON WOOL DISPENSER PACK

Package has tuck-in ends and can be re-sealed. Hygiene ensured. Elegant design of pack makes it perfect for a lady's dressing table. Only as much as is needed is pulled out at a time.

B.P.C. quality cotton wools. Hospital quality cotton wool (Drug Tariff). Sterilised and Unsterilised in all weights, for Home and Export,

Quantities labelled with your own labels from $\frac{1}{2}$ oz. to 16 oz. standard packets.

Bottle neck wool, filter pads, gauze and cotton tissue B.P.C. Quality, Respirator refills,

PACKING | for thermal, sound and vibration insulation and protection. MATERIALS

NEEDLELOOM FELTS

COTTON WOOLS

Bleached and Unbleached Rolls from 2 in. to 40 in. wlde, weights 3 oz. per sq. yd. upwards.

Sized Waddings. Cut Sizes or Rolls.

E. ILLINGWORTH & CO. (Bradford) Ltd.

SHELF MILLS, SHELF, NR. HALIFAX, YORKS.

Tel: BRADFORD 76261/9 Grams: "ILLMOND BRADFORD"



THE CHEMIST AND DRUGGIST

THE WEEKLY NEWSPAPER FOR PHARMACY and all sections of the drug, pharmaceutical, fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and of the Pharmaceutical Society of Northern Ireland

October 6, 1962

No. 4312

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PUBLISHED BY

Cumulative price list (home copies only): loose supplement.

MORGAN BROTHERS (PUBLISHERS), LTD., at 28 Essex Street, Strand, London, W.C.2 Telephone: Central 6565

Telegrams: Chemicus, Estrand, London

MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS

C) MORGAN BROTHERS (PUBLISHERS), LTD. 1962

GLASGOW: 160 Nether Auldhouse Road, S.3. *Phone: Langside* 2679, LEEDS, 16: 32 Wynford Rise, West Park. *Phone: Leeds* 67 8438. WOLVERHAMPTON: 89 Woodland Avenue, Teitenhall Wood. *Phone: Wolverhampton* 52301.

ANNUAL SUBSCRIPTION

which includes The Chemist and Druggist Diary and Year Book. £3 10s. Single copies 1s. 3d. each (postage 5d.).



SHAMPOO SERIES

in 16 sparkling, simple-to-use shades.

BRUSH-ON SERIES

in 7 wonderfully true-to-life shades designed to cover and colour hair up to 50% grey and to revitalize dull, faded or mousy hair.

FANTASY SERIES

in 11 exciting shades for party-time prettiness.

WHOLESALE 2/ - + P.T. RETAIL 4/

INECTO—the largest and most experienced manufacturers of hair colouring in the world

Hair Magic is backed up by a full-scale advertising campaign in all the big-circulation magazines for women, and in the Daily Mirror. Write today for a free supply of 8-page give-away booklets on Inecto Hair Magic.

Advice Bureau:

Inecto House, 27 Dover St., London, W.1. HYDe Park 7541 (12 lines)



how to plan ahead

Don't take chances with your future.

Plan ahead now; leave the crystal gazing to others by taking out an M.I.S. PENSION PLAN—designed specially for you, the professional man, with your particular problems in mind.

Post the coupon today for more details of the M.I.S. PENSION PLAN—

May I have more details of the PENSION PLAN
Name
Address
131-133 New London Road, Chelmsford, Essex
MEDICAL INSURANCE SERVICES (PROFESSIONS SUPPLEMENTARY TO MEDICINE) LTD Chelmsford 51581 73



the *Lilly* medical representative is now discussing with your doctors

TRADE MARK TRADE MARK BRAND

ACETOHEXAMIDE

New oral anti-diabetic agent which provides dependable and economical control of stable adult diabetes with a "once daily" dosage.

Availability

Tablets 'Dimelor' 500 mg. yellow, scored. In bottles of 100, 500 and 1,000.

Trade Prices

100 19/- 500 89/- 1,000 175/- (Plus Purchase Tax).

From your usual Lilly Wholesaler

ELI LILLY AND COMPANY LIMITED . BASINGSTOKE . ENGLAND



THE CHEMIST AND DRUGGIST 36 October 6, 1962

Desogen



Bonus offer

Geigy

Profit		88 % on the A parcel	
with		Competitive price 2/6 fo 24 lozenges	
Confidence		Effective and safe	
Parcel A	6 dozen	with bonus of 18 boxes	
Parcel B	4 dozen	with bonus of 10 boxes	
Parcel C	2 dozen	with bonus of 4 boxes	

Each Desogen lozenge contains 0.5 mg of (Dodecanoyl-N'-methyl-aminoethyl)-(phenyl-carbamyl-methyl)-dimethylammonium chloride

Geigy Pharmaceutical Company Ltd. Manchester 23



4 full pages...

Four striking full pages in the Sunday Telegraph, The People, Sunday Pictorial and the Sunday Express. Those are some of the spaces Dreamland have booked for the most exciting electric blanket advertising ever. Millions will read how a Dreamland with exclusive 'Safety-Seal' offers them greater safety . . . greater comfort. And make no mistake, after the advertising will come the *demand*—a demand that's expected to be the biggest ever. That means there'll be more money in it for *you*. So be ready. Place an order with your wholesaler for Dreamland electric blankets . . . today.

... AND 4 POINTS TO REMEMBER

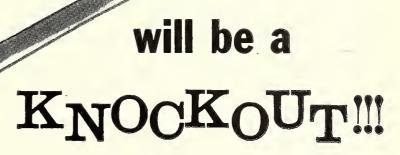
- All three Dreamland models for the 1962/63 selling season have 'Safety-Seal'!
- A variety of display material is available to help you with those extra sales.
- Once again Dreamland are offering an extra 5% discount over and above normal trade terms.
- £725 in cash prizes must be won in the Dreamland Trade Competition. Ask for our brochure and enter now.



the only electric blankets with 'SAFETY-SEAL







Look at the facts. From October to
December, Britain will be seeing
powerful big-space advertisements
in leading national newspapers and
major women's magazines.
Readership? Over 29,800,000—
nearly 30 million potential customers.

Lots of them pass your shop. Bring them in with attractive displays of Stratton compacts.

Order from your wholesaler NOW



BEWARE OF IMITATIONS—THERE IS ONLY ONE STRATTON



Perfume 7/6 Cologne 9/-Talc 4/9 Just arrived from America! Lady Manhattan. The perfume bubbling with life and loveliness. The perfume that grows as you wear it, from a haunting suspicion to a flaunting certainty. Lady Manhattan. It's darling!

FIELDS OF LONDON * NEW YORK * PARIS

Just arrived—with all the glamour of Manhattan

A brand-new perfume, Lady Manhattan. The only perfume that dares to offer your customers that 'million-dollar feeling'.

In new skyscraper packs

—perfume, cologne and talc all to match.

Perfume retails at 7/6. Cologne retails at 9/-. Talc retails at 4/9.



The 'million-dollar look' right



in your shop

These exciting new display ideas bring a breath of American success right into your shop. Put the tester and the free samples in easy reach of your customers—they won't be able to resist Lady Manhattan!

Illuminated Manhattan skyscraper. Side panels can be used separately.

Free sample sachets.

Tester for perfume and cologne.

Order your free displays with your stock of Lady Manhattan.

All U.K. enquiries to London Office:

J. C. & J. FIELD LIMITED,

9a NEW BOND STREET · LONDON · W1



62/A/2

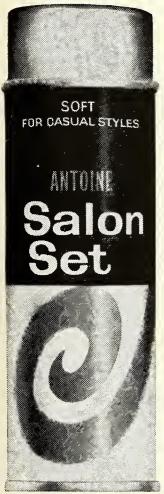
ANTOINE — famous throughout the world for his miraculous skill in creating hair beauty—presents his new and wonderful hairspray SALON SET.

More and more women today buy hairsprays . . . and there are far bigger sales to come*. A great future's waiting for SALON SET, with excellent profits for you.

*Hairspray sales in USA-140 million per year; in UK, as yet 9½ million per year! Powerful promotion and advertising programme will put Antoine SALON SET in the forefront of hairsprays—

Top National Newspapers and Women's Magazines will carry huge, exciting Salon Set advertisements.

DAILY MIRROR FULL PAGE DAILY EXPRESS HALF PAGE WOMAN'S OWN PAGE AND HALF PAGES WOMAN'S REALM FULL PAGE AND HALF PAGES



Two ideal sizes
— super-large to
retail at 10/6, refillable handbag size
at 4/11d.
Two textures, to
suit every customer — Firm for

suit every customer — Firm for elaborate styles. Soft for casual styles. Excellent terms to

give you really worthwhile profits.

And a fabulous Television Commercial filmed in Paris by top French film company brings the glamour and elegance of SALON SET to millions of women. Showing on all ITV stations.

Order stocks *now*. Your Antoine representative will be calling soon with your Salon Set display material.



Salon Set

PARIS · NEW YORK · LONDON

Controlled in the U.K. by Cooper, McDougall & Robertson Ltd., Berkhamsted, Herts. Telephone: Berkhamsted 333

Prescribed for good looks and long wear

GARDINER'S

professional overalls

KAY Overall, in nylon, with flared skirt, tailored collar, three pockets and long sleeves. Colours: Lilac, Turquoise, White, Floral Blue, Royal Blue, Navy, Pink, Primrose. Sizes: SW, W, WX, OS.

WESTMINSTER Generously cut, well-finished coat, with tailored shoulders and seam back with vent. Two side pockets, one breast pocket with pen division. Side vents to trouser pockets, vent cuffs. Detachable buttons. In sizes 34-48" chest: white satin dríll 36/6, heavy khakí drill 36/11, grey dením 36/11. In sízes 34–46" chest, white nylon 59/11.





HER MAJESTY THE QUEEN SUPPLIERS OF

1 Commercial Road, London E.1 (opposite Aldgate East Tube Station) Phone BIShopsgate 6751/3. Open all day Saturday. Closed 1 p.m. Thursday. Also at Deptford House, Deptford Broadway, S.E.8. Tel: TIDeway 1148.



ORDER BY POST:

We pay postage and packing on all orders value £5 or over, orders under £5 please include 2/- extra for postage and packing. Special Quotations for bulk orders.



F. M. LANGFORD LIMITED

Manufacturing Chemists & Perfumers

40 - 41 - 42 WELLCLOSE SOUARE

Telephones & Telegrams: ROYal 4743

all PRODUCTS

LONDON ROYal 4744

..and around the house...

FRAGKIL Fly & Pest Killer

FRAG-AIRE



- * Profitable
- * Quality
- * Distinctive
- * Attractive

Main Distributers London and Southers Counties for Menfort Parfums, Vienna.

WHO BUT PIFCO

IS FIRST IN BRITAIN WITH FOOT MASSAGERS!

Most popular novelty on the market

For lively feet ... Happy feet Ideal for dramatic demonstrations
Priced to sell ... 84/-

Heavily advertised to 46,156,000 newspaper readers.



BONUS TERMS

PRISTACIN

BACTERICIDAL CHEWING GUM

This newly formulated product is being promoted to doctors by direct mail, medical press and through our force of medical representatives. To help you stock up to meet the demand we expect, every dozen 12-piece packs you order will be charged as ten.

Formula: each piece of Pristacin contains cetyl pyridinium chloride 4 mg. in a chewing-gum base carefully flavoured for high acceptability.

Presentation: as foil-wrapped pieces of chewing gum in boxes of 12 and 144.

-	Price	Trade per dozen	Retail each
	12-piece box	20/-	2/6
	144-piece box	216/-	27/-

BONUS OFFER 1 dozen x 12 pieces in complete cartons at a trade price of 16/8 each. Available through your normal wholesaler or direct. This offer ends on 17th November.

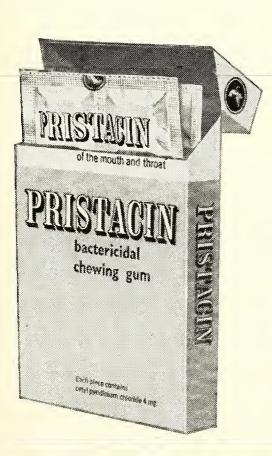
PRISTACIN BATHES THE THROAT IN A BACTERICIDAL SOLUTION

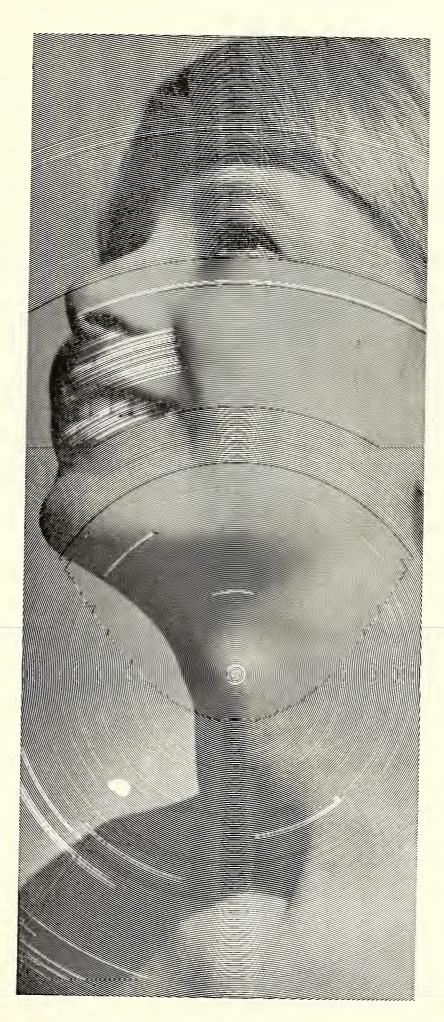
PRISTACININCREASES SALIVATION—the natural way of keeping mouth and teeth clean and healthy, and reducing inflammation.

CHILDREN, ESPECIALLY, WILL LIKE PRISTACIN

Further information can be obtained from HORLICKS LIMITED, PHARMACEUTICAL DIVISION, SLOUGH, BUCKS







Britain's best buy in ELECTRIC BLANKETS THE DORMOUSE

ONLY 50/-

and
GUARANTEED I YR.

(INC. TAX)



MADE BY

BELMONT MANFG. CO.

JAMES ST. SOUTH, BELFAST

SPECIALISED MAKERS OF ELECTRIC BLANKETS SINCE 1952

- IN LOVELY SOFT RAISED
 COTTON WITH SATIN BINDING
- IVORY 3-POSITION SAFETY SWITCH AND 9 ft. WHITE PLASTIC FLEXIBLE
- IN COMPACT ATTRACTIVE BOX FOR XMAS AND EASY DISPLAY

Also
DOUBLE BED
SIZE

77/6

(INC. TAX

OBTAINABLE FROM

SANGERS LTD.—London, Bristol, Bedford, Newcastle

MAY ROBERTS & CO. LTD. — London, Liverpool, Plymouth, Maidstone

THE CHEMISTS SUPPLY CO. LTD. —
Bournemouth

THOS. McMULLAN & CO. LTD. — Belfast

SOUTHALL BROS. & BARCLAY LTD. —
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baumol





is a very fine and very profitable soap

to recommend to your

more discerning customers



DUNCAN, FLOCKHART & CO LTD

EDINBURGH



During the inclement months ahead, more and more doctors will be 'faced' with our publicity for KARVOL... will be reminded why KARVOL is the most convenient decongestant... will be prescribing KARVOL for patients who present their 'sniffs' for treatment.

Make sure your stocks will meet the demand.

packing: tins of 10 capsules generous bonus terms.



THE CROOKES LABORATORIES LTD · PARK ROYAL · LONDON NW10

NHALANT CAPSULES



From 1st October, 1962, *Medihaler* products will be issued in a new 15 ml. (300 dose) vial. After this date, no further supplies of 10 ml. vials will be available from wholesalers.

ENDORSEMENT OF PRESCRIPTIONS

For a period following the introduction of the new 15 ml. vials, chemists who dispense prescriptions for *Medihaler* products will normally be remunerated at the rate for the 10 ml. vial. It has been agreed, however, with the Central N.H.S. (Chemists' Contractors) Committee and with the Ministry of Health that, when the 15 ml. vial is supplied, chemists should endorse prescriptions accordingly and the higher remuneration will be made.

This arrangement will apply until stocks of the 10 ml. vial held by chemists are exhausted.

PACKS AND PRICES

	Price	Price to Pharmacy		Price to Public			
	COMPLETE	REFILL	ADAPTER	COMPLETE	REFILL	ADAPTER	
Medihaler-epi (15 ml.)	15/-	12/8	2/4	22/6	19/-	3/6	
Medihaler-iso (15 ml.)	15/-	12/8	2/4	22/6	19/-	3/6	
Medihaler-iso Forte (15 ml	.) 17/8	15/4	2/4	26/6	23/-	3/6	

Medihaler: registered trade mark

registered user







Every year, more independent charact, seek greater security from the competition of the multiples and encroachment of supermarkets and grocery chains. This is way more owner-pharmacists are joining UNICHEM in support of all it stands for. Wholly owned and controlled by independent chemists, UNICHEM offers all these free benefits: best-term buying; do or night ordering; constant availability of ethicals and sundries; a share in the profits; a chance to buy shares sales aids; advisory services. The more you trade through UNICHEM, the more you contribute to your own security

DEPOTS AT

Broadwater Road, London, S.W.17 Balham 1151
Fortescue Road, London, S.W.19 Cherrywood 3322
8 Westbury Road, London, E.17 Coppermill 5566
Pool Road, Nuneaton, Warwicks. Nuneaton 4210

HEAD OFFICE

unichem

UNICHEM LIMITED
CROWN HOUSE MORDEN SURREY Cherrywood 3831

Collective security through collective action



KODACOLOR

The SIGMA '2 in I' service means B & W and Colour in one bag, resulting in less mistakes, faster turnround and only one account. Phone for more details about our TOP quality - TOP service - TOP

And if you happen to be outside the London Van Delivery area, we operate a return-of-post service. Send for details and latest price list to:

PHOTO-SERVICE LTD.





New model in sterilisable high density Polythene, individually boxed in attractive cartons.

Wholesale: **31/8d.** doz. + **10**% P.T.

Retail: 4/3d. each.

Made by J. L. CAPLIN LTD.

178/180 Homerton High Street, London, E.9.





Order from your usual , Wholesaler

Do not disappoint your customers

-stock and display



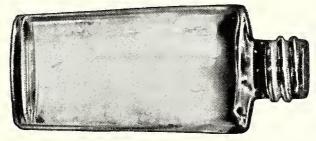
Powders and tablets for the sale and speedy relief of headaches, colds, chills, rheumatic and nerve pains.

EX ALL LEADING WHOLESALE HOUSES



LANE PARK

THE INTERNATIONAL BOTTLE CO., LTD. LONDON \mathbf{W} . I Telephone MAYfair 6992 (5 lines) Telegrams AUTREFOIS, AUDLEY, LONDON









Popular L'Oreal Bleach and new formula Tress both get exciting modern packs plus nationwide advertising designed to shift stocks off your shelves faster, push your profits higher . . .

From June 1962 to April 1963, L'Oreal Bleach takes regular spaces no the big circulation newspapers — Sunday Pictorial and Daily Mirror, as well as Woman, Woman's Mirror and Honey. Your customers will want to see L'Oreal Bleach in your shop, and when they do they'll be sold on the gay good looks of the new quality pack.

From June 1962 to March 1963, millions of readers of Woman, Woman's Own, Woman's Realm, Woman's Mirror, Daily Mirror and Sunday Express will all be told over and over again about the important difference in Tress—a new French formula which gives hair the fullness that's needed for modern styles. Women will be persuaded to try New Tress and see how it really does make sets last twice as long and condition hair to shining beauty.

* Gaily packed L'Oreal Bleach and New Tress deserve a good place on your shelves - stock up now and see how soon they leave you with profits that jump up and up!

NEW PRICES L'OREAL BLEACH

Retail Price 3/- per carton Trade Price 18/5 per dozen cartons

NEW TRESS

Small Size

Retail Price 1/10 per bottle

Trade Price 10/9 per dozen bottles plus tax

Large Size

Retail Price 3/- per bottle

Trade Price 18/5 per dozen bottles pius tax

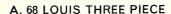
A. 65 DIANA TWO PIECE

Elegant white brush decorated with padded insert in Powder Blue or Mushroom, complete with dressing comb.

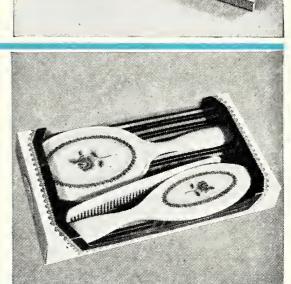
Retail 9/11



TOP GIFTS BY BARNET



Hair brush, hand mirror and large dressing comb decorated with gold French Rose. Retail 11/6



GIFT BRUSH SETS

To solve your problem of choosing acceptable gifts, Barnet carefully select special lines that are proven best sellers. Our new range with "Louise" adds grace to any dressing table at exceptionally low prices.



A. 70 BARONET BRUSH

In unusual gift pack. Smart military brush complete with comb. Retail 6/6



S. 81 SAFARI FITTED CASE

Luxurious padded travel case with military brush, comb and Safari after-shave. Retail 14/11

ORDER FROM YOUR WHOLESALER NOW

DISTRIBUTED BY E. R. HOLLOWAY SALES LTD, BESSEMER RD, WELWYN GARDEN CITY, HERTS. TEL: WEL. GDN. 24444 (Wholesale only)

What she wants and thousands like her is

LOTILGREAM

NATIONALLY ADVERTISED TO ENSURE FLOURISHING SALES—

900d profits for you!

For painful cracked thumbs and fingertips, that trouble so many of your customers in winter, specially prepared LOTIL CREAM is a real boon and blessing. And with every tube of LOTIL you sell, you make not only a satisfied customer, but a profit of 1/1d. for yourself.



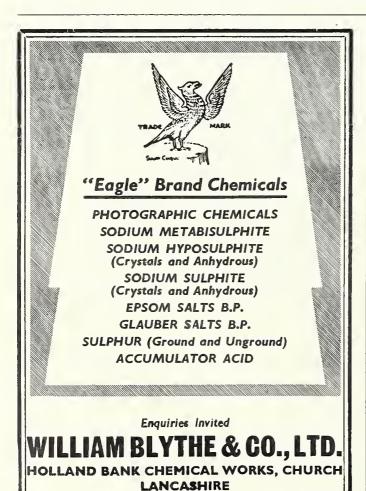
33 a tube

Trade Price 21/4 per doz. plus 4/5 P.T. Retail 3/3 (inc. P.T.). Bonus terms—13 to the doz. on orders for 3 doz. 5% discount on orders for £5 which may include other John Bell lines.

JOHN BELL, HILLS & LUCAS LTD., Oxford Works, Worsley Bridge Road, London, S.E.26

Grame: BLYCO, ACCRINGTON





Tel: 32141/3 ACCRINGTON



PRIDE

hair beauty PREPARATIONS
SELL ON SIGHT!

Spraying Hair Lacquer

Retails at 3/6

The finest of hair lacquers with a delightful perfume available in the new Super Spray 3 oz. polythene bottle boxed in 1 doz. units in eye-catching display outers. Refill sachets also available packed in 1 doz. outers retail at 2/2.



Egg and Lemon

CREAM SHAMPOO Retails at 2/6

24 shampoos in plastic injector dispenser—Hair and scalp always kept at its best with this high-foaming soapless cream shampoo made from the natural benefits of shell eggs and luice of fresh lemons. Trial—3 shampoos, tubes 9d.; 3 individual shampoos linked together 10½d, all packed in display outers.



Scalp Milk Retails at 2/6

An alleviating scalp lotion for use after shampooing and before setting. Allays scurf irritation; quick drying action holds the hair, removes tangles, leaves hair free from all deposits and with a beautiful lustre.



PRIDE PRODUCTS SELL ON SIGHT I

These Fast-Selling lines are now being advertised continually in National magazines.

From your usual wholesaler or direct-

B. N. FURMAN (PRODUCTIONS) LTD., 133 Fonthill Road, N.4



Halina 35X

- ★All metal precision 35 mm.
- ★ f/3.5/45 mm. colour corrected lens.
- ★ Synchronised shutter up to 1/200th sec.

★ Coupled film Transport and exposure counter. BLACK/WHITE COLOUR IDEAL FOR

Ever Ready case £1/8/1

£7-13-3

Halina

35 mm. TABLE **VIEWER**

- ★ Battery Operated.
- ★ The extra large, precision ground twin optically polished lenses are made from the world-famous Chance Pilkington Optical Glass giving perfect enlargements
- ★ Large magnification 21 times.
- ★ Lenses can be taken out for cleaning purposes.



Two U11 Batteries 10d. extra

£1-19-6



★ All metal.

Halina Al

★ 2½ × 2½ and 35 mm. on 120 film.

★ f/3.5/80 mm. colour corrected lens.

★ Synchronised shutter speeded up to 1/100th sec. Coupled front lens focusing. Leather Ever Ready case £2/7/-



BEST VALUE IN 35 mm. **CAMERAS**

- Three apertures 8-11-16.
- ★ Three apertures 8-11-16. ★ Bulb and instantaneous shutter.
- ALL METAL with satin chrome/ leatherette finish.
- Synchronised for flash.
- ★ Double exposure prevention.

Ever Ready Case £1/8/1



Halina **VICEROY**

- ★ TWO CAMERAS IN ONE
- ★ All metal.
- ★ 21×21 and 35 mm. on 120 film.
- ★ Double meniscus f/8 lens.
- Actual size ground glass reflex viewfinder.

★ Synchronised for flash.

Halina 150 2"x2" STILL PROJECTOR

★ f/3.5/80 mm. hard-coated colour corrected lens. ★ 150 watt. ★ Double condensers. ★ Helical focusing. ★ All metal. ★ Heat absorbing filter. ★ Accepts all 2"×2" slides.

Can be converted to 300 watt projector in a few minutes by fitting the HALINA allmetal Fanbase £5/5/0



WO-IN-ONE CAMERA 21"×21" or 15×11

- ALL METAL.
 Achromatic lens f/8.
 Front lens focusing.
 Apertures 8-11-16.

- Double exposure prevention. Synchronised for flash (bulbs).



19-6

Byer Ready Case £1/9/11 detachable back J. J. SILBER LTD., 11 Northburgh Street, London, E.C. Telephone: CLErkenwell 8031 (10 lines)



1001 USES

DRY GRANULATION · WET GRANULATION

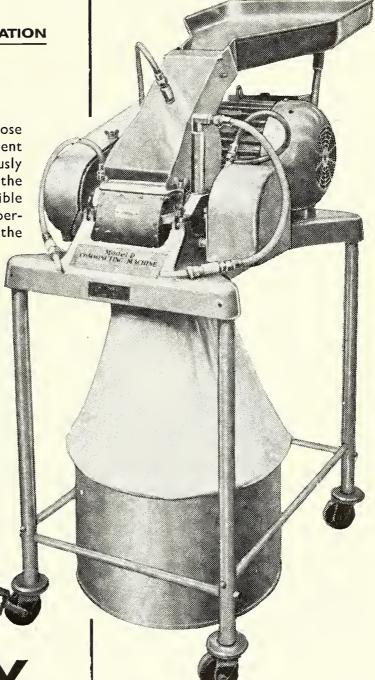
MIXING · DISPERSION

SIZE REDUCTION

The Manesty Fitzmill all purpose comminuting machine gives excellent results with many processes not previously attempted. The unique design of the Fitzmill feed throat and the reversible stainless steel comminuting chamber, permit the material to be presented to the stainless steel blades at the correct angle and in such a manner that most of the work is carried out "impact in air". It is for this reason that screens with large holes can be used and the throughput is correspondingly increased. For instance, screens with holes in the region of one inch can be used for wet granulation. An important feature of the Fitzmill is that there is no metal to metal contact in the comminuting chamber and, therefore, no danger of metal contamination in the granulation.

For wet granulation, dry granulation, pulverizing, dispersion or wetting, milling of crude ointments, sizing of crude drugs. The correct combination of screen size and speed permits materials to be processed to any desired size.

MANESTY FITZMILL

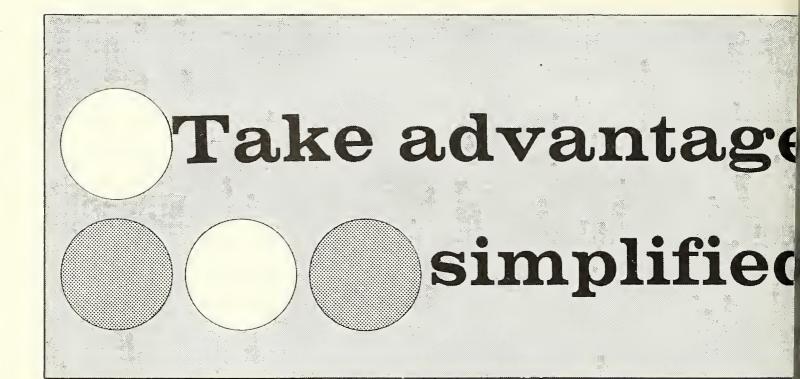


MANESTY MACHINES LTD . SPEKE

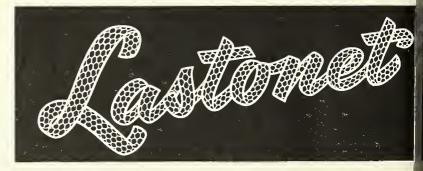
LIVERPOOL 24

Telephone: Hunts Cross 1972

Telegrams: Manesty, Liverpool 24



order all your surgical hosier



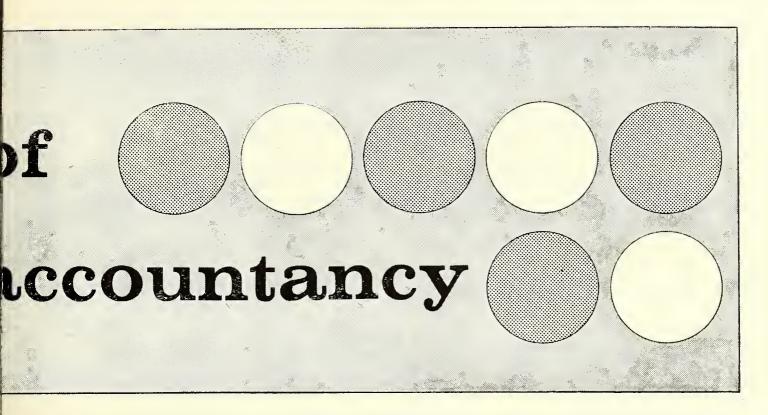


STANDARD AND LIGHTWEIGHT ELASTIC NET

VARICOSE VEINS, TIRED ACHING LEGS. If you have seen samples of Lastonet standard and lightweight elastic net you will appreciate how cool, firm and comforting this material is. All Lastonet elastic net stockings are made to measure thus providing EVEN SUPPORT. Supplied under the N.H.S., within 3 - 5 days on receipt of your order. POST FREE.



LASTONET PRODUCTS LT



equirements from

Lastonet range of Surgical Hosiery embraces every type of stocking supplied under the N.H.S. This bles you to recommend Lastonet at all times and take advantage of ONE SUPPLIER—ONE COUNT—ONE CHEQUE. Lastonet accounts may also be paid through the N.P.U. Clearing House. In what this means to you—less work—reduced overheads and increased efficiency, PLUS A POST-EE SERVICE. It is a sound policy from every angle to recommend Lastonet Surgical Hosiery.





STANDARD AND LIGHTWEIGHT ELASTIC YARN

If your customer prefers a yarn stocking, recommend Lastoyarn standard weight or Lastofine lightweight elastic yarn stockings. Made from the finest elastic yarn with Helanca tops and heels for comfort and long wear. Lastoyarn are available in large, medium or small sizes; Lastofine in normal foot sizes. Both are supplied under the N.H.S. by return. POST FREE. Made to measure if required, with slightly longer delivery. Your requirements in One-Way Stretch, both seamed and seamless can also be supplied by

REDRUTH · CORNWALL

NUCTA EGG AND LEMON SHAMPOO

IN THE READY SELLING

1 - TUB

SUFFICIENT FOR TWO OR THREE SHAMPOOS

6/8 per dozen (plus tax)

ALSO AVAILABLE IN THE FAMILIAR JARS TO SELL AT 2/8 AND IN THE 3/II FAMILY SIZE TUBE.

From your wholesaler or direct



STEWART, GOODALL & DUNLOP LTD. 121a PRINCES STREET, EDINBURGH



A REVOLUTIONARY STEP IN SLIDE PROJECTION

The Gnome Classic reflects the latest trends in British and Continental projector design and incorporates improvements exclusive to this fine projector.

Projector £10.19.6 Lamp Extra - - £1.10.0 Leather-type zip fastener Carrying Case - - - -£1.9.6 300/500 watt version is now available. Price £15.15.0





Send for full details.

Photographic Products Ltd., Caerphilly Road, Cardiff

ILODERM

a unique self-sterile Ointment that compares with no other in the treatment of:-

- **BURNS** •
- BEDSORES .
- IMPETIGO •
- NAPKIN RASH
 - DERMATITIS .
- NIPPLES CRACKED

ask your usual wholesale House for supplies

LORNE STREET, HAMILTON, LANARKSHIRE

Gossamer

Not something you actively sell, or need to sell, but a trusted product which sells itself

Surely, therefore, it is only fair to your customers to discreetly announce the fact that you are a supplier of Family Planning requisites, so that they can be sure you are stocking before they make their purchase.



Please ask for copies of the booklet "Modern Family Planning" as well as the perspex shelf strip "Family Planning Requisites."



DUREX GOSSAMER



Now in the new 12 pack

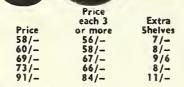
Durex Gossamer is the new lubricated protective with the famous name behind it. It answers the problem of reliability with increased sensitivity. In 3 or 12 packs, 3/9 or 15/-.

BRAND NEW . HEAVY GAUGE STEEL SHELVING

FREE DELIVERY

N. Scotland, Ireland, I.O.M. 10% extra. 71" high x 34" wide, 12" deep with 6 shelves

	Ma at		
Height	Width	Depth	No. of Shelves
71"	34"	9″	6
7]"	34"	12"	6
71"	34"	15"	6
85"	34"	12"	6
85"	42"	12"	6



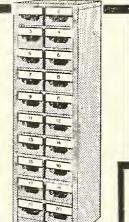


Brand New

42" high, 13" wide, 12" deep. 20 DRAWERS: 5" wide, 3" high, 11½" long. 5tove enamelled dark green.
Direct from manufacturers.
Write now for list of

other sizes.

C.W.O. or C.O.D.



- * EACH SHELF WILL HOLD OVER 3 CWT.
- **★ SHELVES ADJUSTABLE** EVERY 2"
- STOVE ENAMELLED DARK GREEN
- * WHITE ENAMEL UNITS 30/- EXTRA

Contractors to H.M. Government and U.K. Atomic Energy Authority.

Buy direct from the Manufacturers.

12" DEEP 34"

ANY SIZE MADE TO ORDER

OCHDALE METAL PRODUCTS

SHAWCLOUGH WORKS · WATERFOOT ROSSENDALE · LANCS. · ROSsendale 2450

KALIU Pet Kemedie

FOR ALL CAGE & AVIARY BIRDS

SCALEX for Scaly-Face. A safe cure, complete with brush. Per bottle 2/6d. retail.

ANTI-CRAMP. Complete with brush. Per bottle 2/- retail.

VIGAMOL. Fertility stimulant and tonic. Tocopherol and codliver oil. Per bottle 1/3, 3/- and 5/- retail.

KAL-MIN an essential mineral and vitamin diet supplement, ensuring perfect formation and growth of the bone structure. A powder which adheres to the seed. Per drum 1/4, 3/9 and 12/- retail. **ENTREX.** For enteritis and intestinal ailments in cage birds. Per drum 1/9, 3/- and 6/-. Liquid Entrex 1 oz bottle 2/3 retail.

SPRITE An effective specific (and preventive) for fever, bronchitis, asthma. Per bottle 1/6, 4/- and 7/- retail.

Also tropical and cold water fish foods NATIONALLY ADVERTISED — generous discounts KALIUM PRODUCTS (REDDITCH) LTD., Adelaide St., Redditch, Worcs. Tel: REDDITCH 4433

POLI-GRIP SALES SOAR

Display Poli-Grip Cream and profit from the sales of America's most widely used cream fixative for dentures, now catching on so rapidly in this country. Sales so far this year are 58% up on 1961! Take advantage of this rising demand and order from your usual wholesaler now. Retail price 2/per tube.

POLI-GRIP For Holding Danturas Firmly in Pt.

STAFFORD-MILLER LTD., HATFIELD, HERTS

AMBYTHENE

(BRAND OF POLYTHENE)



MEDICINE MEASURES

UNBREAKABLE—ACCURATE

with or without close fitting lids obtainable from usual distributors at 12/1 dozen with lids or 8/9 dozen without lids.

> Wholesaler's supplies obtainable direct from

AMPLEX APPLIANCES (KENT) LTD.

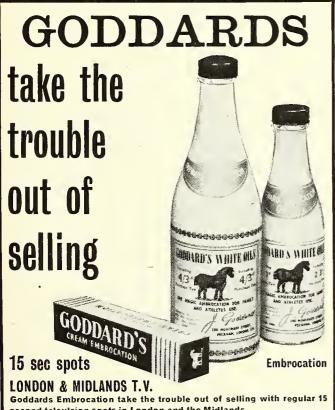
19 DARTMOUTH ROAD, HAYES, BROMLEY, KENT

(RAVensbourne 5531)

Quinine Sulphate B.P. 1953 & 1932



THE BRITISH DYEWOOD COMPANY LTD. 19 St. Vincent Place, Glasgow, C.1.



second television spots in London and the Midlands.

Sales prove these 'time tested" products bring satisfied customers more profit for you.

J. G. GODDARD & CO. LTD.

100 MONCRIEFF ST., PECKHAM, S.E.15. NEW X. 0767



POROUS PLASTERS





POROUS BELLADONNA PLASTERS B.P.1932 on white cloth, red flannelette and red felt.

POROUS BELLADONNA PLASTERS B.P.C. on white cloth. POROUS BELLADONNA BREAST PLASTERS B.P.C. on white cloth.

POROUS WINTERGREEN AND CAPSICUM on white cloth.

IMPROVED SPECIAL KIDNEY PLASTERS Pink flannelette. Back plasters—non-poisonous.

All Porous Plasters mounted on a Backcloth and packed in a Wrapper with directions for use (Boxes of $1\ dozen$).

EDWARD TAYLOR LIMITED MONTON ECCLES MANCHESTER



covers and captures the Christmas market







PRESS TELEVISION DISPLAY MATERIAL

plus YOU will make "THERMOS" Brand vacuum ware the fastest-selling Christmas gifts this year. The exciting campaign is planned to bring fresh awareness of all "THERMOS" Brand vacuum products into almost every home in the country, and somore customers into your shop.

PRESS

-complete Christmas Coverage

Illustrated here are the Xmas advertisements to be featured prominently in the Christmas Shopping sections of all 29 leading magazines. And in the Daily Mirror. And in the Daily Herald.

THESE ARE THE MAGAZINES:

Woman, Woman's Own, Woman's Own Christmas Book, Woman's Weekly, Woman's Realm, Woman's Mirror, Today, Good Housekeeping, Housewife, Woman and Home, Modern Woman, Woman's Journal, Everywoman, Home, My Home, Homes and Gardens, Ideal Home, Reader's Digest, House Beautiful, Field, Country Life, Queen, Tatler, Radio Times, Punch, Illustrated London News, Sphere, T.V. Times, The Viewer, Look Westward.

T.V.

To be seen by 15 million people

"THERMOS" Brandvacuum products—so successful on T.V. when they appeared last year—will again be featured in Television Advertising Magazines during the peak selling period before Christmas. Each of the following T.V. contractors will feature "THERMOS" in two Christmas magazine programmes.

London A.R.

North Granada

Midland A.T.V.

Wales T.W.W.

Southern T.V.

Scottish S.T.V.

DISPLAY Attractive 4-colo

Attractive 4-colour Xmas Showcard

Featuring popular Thermos Brand vacuum products—will create maximum point-of-sale interest.





Distinctive Product Crowner

Three-colour crowner for the entire range to give eye-appeal and increased sales.

Make sure you stock "Thermos" Brand Vacuum flasks, jugs, food jars and bowls at Christmas — and all the year round.



LIMITED · BRENTWOOD · ESSEX

THE WORD "THERMOS" IS A REGISTERED TRADE MARK.

Bonus OFFER OCT 1st to OCT 13th 1962

Ties in with heavy advertising to meet peak consumer demand from November until March

Bemax advertising is timed to coincide with the winter illness peak—to inform millions that they are bound to benefit from Bemax.

Bemax is advertised nationally all the year round in the Radio Times, 7 mass circulation national newspapers, 9 women's magazines, 78 provincial newspapers and Family Doctor.



Profit from the Bemax Bonus

HERE'S HOW YOU PROFIT *

	PARCELS	STANDARD LIST, PRICE	QUANTITY TERMS		BONUS TERMS	PROFIT
BXI	6 dozen $ imes$ 2/- size	114/-	108/-	F a	105/-	39/-
BX2	3 dozen × 3/6 size	100/6	95/3		92/3	33/9
BX3	$l\frac{1}{2}$ dozen \times 6/6 size	93/9	89/3		86/3	30/9
BX4	2 dozen \times 3/6 size $\frac{1}{2}$ dozen \times 6/6 size	98/3	93/3		90/3	32/9
BX5	dozen \times 2/- size $\frac{1}{2}$ dozen \times 3/6 size $\frac{1}{2}$ dozen \times 6/6 size	100/6	95/5		92/5	33/7

You and your customers are bound to benefit

SHOW MATERIAL



Attractive showcards are available and should be shown for at least 14 days.



Telephone: CENtral 6565

Address Box Number Replies to: THE CHEMIST AND DRUGGIST, 28 ESSEX ST., STRAND, LONDON, W.C.2

APPOINTMENTS — 24/- per ½" s.c. minimum and pro rata. AGENTS — AUCTION SALES — BUSINESSES FOR SALE and WANTED — CLEARANCES and WANTS — CONTRACTS — MISCELLANEOUS — PATENTS — PARTNERSHIPS — PREMISES — PUBLIC and LEGAL NOTICES — SITUATIONS VACANT. Run-on — 4/- per line (minimum 20/-). Semi-display — 24/- per ½" s.c. minimum. Displayed with border rule, larger type faces and blocks — 60/- per s.c.i. minimum. Reduced rates for one-third, one-half and full pages on application. SITUATIONS WANTED — 6/- per 18 words minimum, then 4d, per word. Use of Box No. — 2/-, Advertisements received by 4 p.m. Tuesday published same week.

PREMISES

LEICESTER. SHOPS TO BE LET, Millfield Farm Estate, Leicester, 5 additional shops, only 3 now remain available serving this estate and surrounding district; each shop has a self-contained maisonette of 3 rooms, kitchen and bathroom, Rents from £550 p.a. exclusive, Garages available, Immediate possession, Sole agents, Jones, Lang, Wootton & Sons, 58 St, James's Street, London, S.W.1. HYDE Park 7151.

BUSINESSES WANTED

BUSINESS WANTED. Pharmaceutical manufacturers and distributors with live and expanding business and available capital wish to acquire pharmaceutical manufacturing business, Box C 4816.

BUSINESSES FOR DISPOSAL

PROPRIETARY MEDICINE manufacturer's business for sale. Specialising in rheumatic remedies; established over 100 years; nationally advertised. Owners wish to retir to expiration of lease. Box C 4813. retire owing

APPOINTMENTS

BRENTWOOD GROUP HOSPITAL MANAGEMENT COMMITTEE

Pharmacist

required to work within Group under direction of Group Pharmacist, Hospitals pleasantly situated within 30 minutes of London by frequent electric train service. Salary scale £690 to £920 p.a. Apply, giving names of two referees to Group Pharmacist, Harold Wood Hospital, Harold Wood, Essex, (Tel.: Ingrebourne 45533.) C7716

CAMBERWELL HOSPITALS MANAGEMENT COMMITTEE, DULWICH HOSPITAL, EAST DULWICH GROVE, S.E.22

Vacancy for

Senior Pharmacist

Salary £770-£1,010 p.a. plus London Weighting Allowance. Apply Group Secretary, Closing date October 18. C 7733

CENTRAL GROUP HOSPITAL MANAGEMENT COMMITTEE

Senior Pharmacist

for Bethnal Green Hospital, Modern department, Salary scale £700—£1,010 p.a. plus higher qualification allowance and London Weighting, Pleasc apply to the Group Secretary, 213 Kingsland Road, London, E.2,

DUDLEY ROAD HOSPITAL, BIRMINGHAM 18 (Category V)

Pharmacist

required for interesting post in a large general hospital, Salary £690 to £920 per annum, subject to 5 per cent, increase, Commencing figure may be up to £845 subject to 5 per cent, increase according to previous experience. Detailed applications, naming two referees, to Hospital Secretary. C 7724

GLENSIDE AND BARROW HOSPITAL MANAGEMENT COMMITTEE

Chief Pharmacist (Category I)

required at Barrow Hospital, National scales and conditions. Board residence available for single officer. Applications, together with names of two referees, should be sent to Hospital Secretary, Barrow Hospital, Barrow Grant President Control of the control of the sent to Hospital Secretary and the sent to Hospital Secretary are Priscol. Gurney, near Bristol.

LEEDS (GROUP B) HOSPITAL MANAGEMENT COMMITTEE, SEACROFT HOSPITAL, YORK ROAD, LEEDS, 14

Senior Pharmacist

required at the above hospital (infectious diseases and pædiatrics) and for duties within the Group as required. Salary £770 p.a. rising

to £1,010 p.a.
Terms of service in accordance with Whitley
Council agreement, Apply with names of two
referees to the Group Secretary. C 7720

ROYAL FREE HOSPITAL GROUP, NORTH WESTERN HOSPITAL, LAWN ROAD, HAMPSTEAD

Assistant-in-Dispensing

21 years of age or over required at the above hospital. Salary in accordance with Whitley Scale ranging from £360 to £575 plus London Weighting and £50 Qualification Allowance. Applications with names of two referees should be addressed to the Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, London, W.C.1. C 7692

STAINES GROUP HOSPITAL MANAGEMENT COMMITTEE, ASHFORD HOSPITAL, ASHFORD, MIDDLESEX

Senior Pharmacist (Category IV)

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and a

Student-in-Dispensing

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THREE COUNTIES HOSPITAL, ARLESEY, BEDFORDSHIRE

Assistant-in-Dispensing
Applications are invited for Assistant-in-Dispensing. Salary and conditions as Whitley Council scale, £425 at age 22 or over, rising to £575 per annum, Accommodation available for single man or woman applicant. Applications, stating age and experience, together with the names and addresses of two referees, should be sent to The Medical Superintendent, C 576

UPTON HOSPITAL, SLOUGH
Senior Pharmacist
required at this Category III General Hospital. Applications naming two referees to Secretary or further information may be obtained from the Chief Pharmacist. C 7705

WEST PARK HOSPITAL, **EPSOM**

Assistant-in-Dispensing required, Full- or part-time, Certificated. Whitley Council conditions, Five-day week, Salary scale £250 at age 18 (£425 at age 22 and over) rising to £575 plus London Weighting, Single residential accommodation available. Apply immediately naming two referees to the Group Secretary. C 7715

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EPSOM, SURREY
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Male registered Pharmacist, aged 25 or over, required for a Chief Pharmacist Category I post at H.M. Prison, Grendon, near Aylesbury, Buckinghamshire, National Health Service salary scale, STARTING PAY ABOVE MINIMUM in some cases for previous N.H.S., Government Service or other comparable experience, ADDITIONAL ALLOWANCE of £25 for higher qualifications, FIVE-DAY WEEK, POST SUPERANNUABLE under N.H.S. superannuation scheme. Annual leave allowance of 3 weeks and 3 days (4 weeks after 10 years' service) plus 8½ days paid public and privilege holidays, Apply Establishment Officer, Prison Commission, Horseferry House (JB 663), Dean Ryle Street, London, S.W.1. C7

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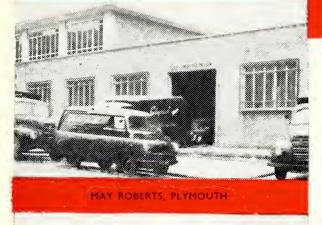
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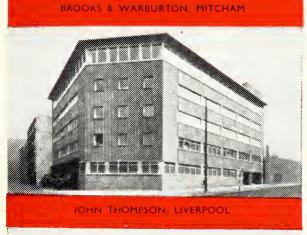
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